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A REVIEW OF LITERATURE, SCIENCE, AND ART.

No. 210, Vol. VIII.

Saturday, January 5, 1867.

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PAPERS OF A SUICIDE.—(II.)

BY HIMSELF.

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I WAS born when the world, at all events, my world, was out of joint. An old order of things was passing away; that which was to succeed was as yet obscure. It has been objected to astrology, that as so many infants are born at the same moment, their fates must be the same, or the learning of the stars must be false. It might be equally objected to the doctrine of a Providence, that it cannot control the same circumstances to be prosperous to one infant and noxious to another. To state the case in this wise is to refute the objections. Either everything is the result of blind inexorable law, or the finger of God, as those who claim the style of religious call it, may be traced in every accident of our lives. Indeed it is more consonant to one school of reasoning to suppose that God acts with the very smallest expense of power, than with the whirlwind or the pestilence. The most evasive form of Divine interference is that of a dream, and this is frequent, both in profane and sacred literature. It was always said that a curse had for many years hung over our family. No cause was ever assigned. We had no traditions of crime—no skeleton. I am no believer in curses myself. But we have all committed one great mistake. We trusted in God. The ordinary person who "trusts in God" merely gets rid in this way of all scruples. He throws his burden into a prayer, and then feels at liberty to trick the whole world. He acts like the dyspeptic man who gorged himself with muffins because he was going to shoot himself. I sometimes doubt which of the three has my greatest admiration; this unknown gentleman, the Emperor Otho, or Petronius. I can combine the two former; one bottle of my old Hock is still left, and I don't see why I should leave it for the policeman, or even the Coroner. But I can only imitate Petronius in one thing. He left his old friend Nero something that he particularly did not want. I think it was an account of his own most private debaucheries, and I shall bequeath my copy of "Ecce Homo"—decidedly the most Anti-Christian book I have ever read—unto Sir Peter Laurie, because he once announced his intention of "putting down" suicide. But to resume. To "trust in God" means in plain English to hope, or even expect that time and space will be annihilated to please you. Trust in luck, trust in fate, trust in yourself, trust in the doctrine of averages, but do not trust in God. I really did, and here I am.

There are few better families in England than mine. I speak not of mere antiquity, but my ancestors had always intermarried with their equals. Once only, that about 150 years ago, had one of them committed anything like a *mesalliance*. He was very young at the time, and owed a large sum of money to an architect who had just rebuilt the family mansion. Architects, however eminent, were in those days no equals for country gentlemen of family and fortune. Yet the picture of this gentleman still hangs in our gallery, and represents him as a man of education and refinement. However, he was to be paid, and my ancestor was ready with the money. Pen and ink was brought in to sign the receipts, but whether by craft or accident, the daughter of the architect thought fit to present them. The creditor observed a glance of admiration, and offered to release the debt, and add as much to it again if a match could be made. In an evil hour my ancestor consented, and for the first time, our blood was mixed with that of a plebeian. It is a fact, that as long as any aristocracy have preserved themselves pure, they have never been wanting to the traditions of their origin. It is the mixture with inferior blood for the sake of wealth, or under the impulse of love, which has undermined castes. So it was with us. Whatever deficiency in mental or bodily soundness affects

our race, may all be deduced from that ill-starred union. The architect died insane, and was buried near, but apart from the members of my race. His daughter survived her husband, and disinherited her eldest son. He showed traces of what was now a family complaint. He performed no duties, and died childless and insane. The world would say the family was worn out, but I know better. We are gradually eliminating the fatal taint; but if it appears in me, 'tis from that degenerate female I inherit the weakness. I have been caught, as it were, in the tail of this domestic meteor, and if I shine brighter in consequence, it is but the result of an atmosphere not justly my own. In old times the insane and the inspired were one and the same. Thus did God manage to conceal His failures. But we no more now believe in the one, than we condone the other. To whom God is to answer for these things we know not. Yet for all these things surely the great Demiurgus shall be brought into judgment.

Nothing can be more wise than the advice of Bonnet, 'That the name of God should never be mentioned to a child before it is ten years old. I was brought up in the fear of God, and I bitterly regret it. Had I served myself as faithfully as I long served Him, I should not have been brought to this pass now. My father was a man who inherited much of the peculiar genius of our family; though he was neither well-read nor well instructed, nor could he be called a clever man. But he had high notions of duty, and of his own prerogative as parent. He never spoke of religion, and perhaps was not aware how thoroughly his ideas were derived from the Old Testament. As he had read very little when young, there was nothing to modify the effect of those wonderful "lessons" which are thundered forth every Sunday from all the pulpits of the land. For many years he loved to sport with his children, as God did with the Jews. He made long-dated promises, but attached conditions which he knew could never be fulfilled. The slightest intimation that even an opinion could ever be passed in secret upon his dealings with us amounted in his eyes to high treason. He rejoiced in proving that we were perpetual and irredeemable sinners against him, and then in graciously according us forgiveness after having exacted some very respectable penalty. This was generally taken out in the shape of a refusal to perform some almost indispensable promise—indispensable, that is, if we were to hold our position in society. Sometimes indeed he would be graciously pleased to "reason" with us. Visitors, if any were there, were almost moved to tears with the exquisite condescension, and the inexpressible softness of the patriarchal language in which he used to announce these communings with his own. But we knew better. If he began in private with a still small voice, he ended up by speaking out of a whirlwind, and issued his commands out of thunder and lightning. I am convinced he modelled his rule on the pattern of that of Jehovah; and I must confess, as far as his power went, it was no bad imitation. He considered himself our Maker, and do what we might for him we were still unprofitable servants. I am sure my father intended to be a good parent. I believe he meant to fulfil every duty under the sun. He was said to have been very gay in his youth, but we saw nothing of the kind. He had read but little of the Pagan Mythology: his model was not Jupiter, as is the case with so many Eton-bred lords, but Jehovah. Perhaps it would have been better for us had it been otherwise. He was temperate and methodical. Whatever his passions might once have been, he never tried to stimulate them, or arrest their natural decay. He was looked upon by everybody who came near him as a pattern. I never heard any man allude to the slightest immorality in his presence. Vice, indeed, was never mentioned in his house. As I grew older, I often sat alone with him after dinner. He was pleased to have me with him, but we never conversed

together. If he spoke, it was precisely like Jehovah deigning to pour forth his celestial griefs against Israel. For the time being I was (I suppose) the prophet, to be charged with a superhuman burden. He complained, in dignified language, of how much he had done for all of us; how little he was understood; what a terrible life he led of care and watchfulness; how perfect his plans were, and how basely they were frustrated. He wanted nothing himself but obedience. Then he would bestow everything upon us. At the same time we could have no possible claim upon him. He needed us not, and might dismiss us from his house at any moment. But he would be just in all his dealings. My father never spoke of religion. Indeed, all our duties centred in himself. I really believe he sometimes thought he was at least parallel with God. He never seemed conscious that there was a New Testament. I doubt if I ever heard him utter the name of Christ. The reason is clear. The Old Testament presents us with a model in Jehovah. The New Testament offers no guide in life for anyone. God deals with Israel as a child, and as a man, and promises to carry him to the grave. Christ offers no pattern to parent, or husband. We may not admire the Patriarchs and Saints of Israel; but they led human lives, and are distinct figures. Of Christ's real Life we know nothing. There is no single act of his which we can properly imitate, for every condition is wanting. "Christ," says the author of "Ecce Homo," "never entered the region of sexual passion." Certainly nothing of the kind is recorded; for Scripture is silent about his betrothal with St. Catherine. But then, what becomes of our "Example"? Our lives, even those of the coldest, are affected unconsciously, at every instant, by the "blind motions" of our blood. The very animals which fawn upon or scratch us recognise this distinction. To pronounce Christ free from all affections of this kind is to deny Him Manhood; to insinuate his subjection to them is to deprive His history of all real pretensions to truth. This is a dilemma which must be faced by the religious; but it will not be in my day. They have other work before them also; and if I cared to live, it would be chiefly to see the Christians compelled for once to come forward honestly and admit what they cannot deny, except to women and those who care nothing for truth, and much for spiritual ease. My father was afraid of death, but he did not believe in damnation. His object was to rule his little kingdom, and the Old Testament extended some sort of guidance. However atrocious, however severe, might be the laws of a theocracy they were consistent with national and family life. The rule of Christianity could only end in the dissolution of all society. Europe has been dimly conscious of this for many a century. The feudal law has been slowly giving way to the Roman jurisprudence which has its roots deep in Pagan life. No one can live in a great city, and suppose it governed by Christianity for a moment. Marriage has been taken away from the priest; the administration of wills from an ecclesiastical court. To preach truth is not the privilege of the parson, but of the Professor. No one expects to hear truth from the pulpit. It has become a mere piece of good breeding to sit out a sermon. Yet preaching, as Gibbon observes, forms no inconsiderable part of Christianity itself. Meanwhile the Ten Commandments maintain their place in our churches; whilst "Thou shalt love thy neighbour as thyself" is repudiated as a sophism, and ridiculed as impossible.

My mother died when I was very young, and my father never alluded to her. He appeared wrapped up in the idea of government. He entered deeply into my conception of God. His perpetual irritability, his want of education, his horrible injustice; his attention to everyone who could point out a fault in us; his ready acceptance of every complaint by tutor or stranger—nothing shook my faith in him. Such I felt had been Jehovah. "Did he but know the facts?" was the nearest

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approach to a complaint I ever uttered, even to myself. I saw in him everything but omniscience.

My step-mother was a thorough Bibliolator. She believed every blessed word of that invaluable book. She was not appalled either by its contradictions or its obscenities. She read it resolutely right through—by chapters. She would stake the whole of Christianity on the celebrated passage in the book of Job, which, as is well known, means the exact contrary of what it has been said to do in a thousand sermons. She considered the translation rather superior to the original; in fact, any suggestion of there ever having been an original almost drove her out of the bounds of propriety, and was in itself a proof of Atheism. She said Pharaoh's heart would have been much harder if God had let him alone; and when a heretical governess once suggested that perhaps Balaam's ass looked only as if it would speak, she said that in that case everything might be "explained away." She was a thorough believer in the theory of temporal retribution. She had no doubt the Tower of Siloam fell on those who deserved it. It might suit our Saviour to put a charitable construction on the accident, but she knew better. At the same time she always bowed to Authority; and if the Bishops and the Parliament had put out a new Version the old one would have been spoken of, in a week, in the same tone she used about the Apocrypha. When Nineveh and the Assyrian marbles were discovered, her delight knew no bounds. Mr. Layard at last had "proved" the Bible. Any one who could assure her the house-tops in Jerusalem were flat had been reckoned an angel. Who would have supposed any evidence of Nebuchadnezzar could ever have been found? She rushed upon the most improper chapters of Ezekiel. She revelled in descriptions of the extraordinary animals. The garments of Aholibamah were compared with the sculptures. Of M. Botta, of course, she never heard, and never would hear. It was a triumph God had reserved especially for England. What had atheistical France to do with prophecy? Fortunate in most of her own family relations, she looked upon good luck as the just reward of piety and prayer. She deemed everyone who differed in opinion with her little better than a heathen. She had arrived at that consonance of opinion and desire that she quite shared the *idem velle atque idem nolle* with her Creator. She had got into her head that I was an unbeliever. There was not at that time the slightest foundation for the idea. But, as she firmly believed in the existence of Satan, she could not suppose he was quiet. He must have his earthly dwelling in some member of every house, and no one but myself presented a fitting tabernacle. Some boys would have enjoyed this distinction. I certainly did not. If I found my step-mother and sisters reading the Bible aloud, the volume was instantly closed. If I flushed a little in the long evenings, a voice came from the sofa to say I was afflicted with a guilty conscience. The activity of my mind was held almost diabolical; yet it was stimulated on every conceivable occasion. I once quoted Thomas Carlyle. There was a "Carlyle" in her time who had been convicted of blasphemy. Nothing would persuade her but what the author was the same person. From that moment I was set down as a future Voltaire. At the same time she had made up her mind that I was to become a clergyman. She kept telling me, indeed, that nothing could make me good enough; but she reminded me that I should, in that case, probably grow no worse. There was only one thing in the Bible which puzzled her. She did not often visit the poor; but when she did, they dwelt somewhat upon the parable of the rich man. "Now he is comforted, and thou art tormented." She never contemplated her turn could come for anything but the "good things" which God has provided for us. She laid it down to "temper," and she sent my sisters to visit them instead.

It was from the lips of this gracious lady

that I first heard the glad tidings of the Gospel of Christ; but, as far as I could make them out, it appeared to me they announced that everyone who did not believe like her would infallibly be damned—as, indeed, the majority no doubt will be. I have no distinct recollection of her until I was about ten years old. For many years she was like an elder sister, and I suspect a great deal more, though I was not then aware of it. It was not till long afterwards that I knew what had been going on. This is one of my great complaints against God. The ordinary trials of life would have been nothing to me. But here was an act of cruelty which cannot be defended. To blur the features before they are developed, to destroy the muscles before they are formed, to wither up the green tree before it is grown up, are things which no words can justify. Pagan humanity submitted to the griefs of Hecuba, and even to the cross of Polycrates. But the fates of Iphigenia and Octavia were not mocked at as the loving-kindnesses of Jupiter. I should as soon think of detecting benevolence in the agonies of some Plesiosaurus, which died some horrible death ages before the very syllable of "Sin" had been uttered by articulate speech. I seldom received any endearments from her. There was not the semblance of anything sensual in our companionship. She was a great invalid, and took no part in the management of the house. She complained much of her solitude, but there I could not sympathize with and only wondered at her. I saw she was unhappy, but she never directly complained of my father. She talked much of her past life, but as I thought all people at forty were old, this seemed to me natural enough. It never struck me that she had any duties to perform in the house. My father asserted his supremacy in everything, and in my favourite book, the Bible, I found no mention of any charge ever been committed to a woman. God never appears to have spoken to them at all, and I had every reason to suppose his government to be the only possible model. It is said that Christianity has elevated the position of woman. I am astonished beyond measure at this assertion. Marriage and the sex are treated with more than Oriental contempt throughout the New Testament. St. Paul left his wife behind him, just as Goethe deserted Frederika, in obedience to his genius. Catholics may ask if I never heard of the Virgin Mary; but, though my step-mother was a most honourable woman, I think, like most English people, she had very little respect for virgins, either male or female.

I have never found anybody who would believe me, but I really was once a very excellent Christian. One of the first things that shook my faith was that all the professing Christians I came near disowned me; yet my life was purer, and my faith more sincere, than theirs. Many went so far as to say that my thoughts were so constructed that I never could become a true believer. I am not one who can give up the facts for any Gospel, and if the real creed was not for me, then the promises of Christ were false; the religion had at once lost its universal character, and was merely a superstition like the others. This chain of reasoning is unanswerable. It was forced upon me by holy women and ministers of God. Long afterwards I found Goethe, though not rejected like me, had felt the same want of universality in the faith. "Aber sind sie das, sind das die Menschen alle?" But I bore up against this species of martyrdom for a long time. I felt like a suspected Pagan, or like St. Paul at Damascus. There was no religious teaching at schools. I did not fear the scoffing of school-boys. But it was impossible to regard an assistant as a Christian minister. His morality was no more Christian than the social essays of the *Saturday Review*. So I resolved to be my own priest. I was much pleased to find St. Paul had been taught directly by God. I saw no reason why God should not do as much for me. I spent much time in prayer. I fasted and denied myself. I fancied God directed me in every detail of my life. An unusual serenity took possession

of me. My companions saw it and wondered. They never guessed the cause, a fact which confirmed me in my opinion that they knew nothing of religion. I observed others who professed to be pious, but they never discovered my secret. I felt I was one with Christ, and concluded they were far from Him. Such religious excitement could not last for ever. I began to think, possibly, they might be right—that I was no Christian after all, but then came the inevitable conclusion—I was true to my principles; the faith might be a mistake. I passed slowly out of the religious halo with which I had surrounded myself. Still, as I look back, I feel that I walked with Christ. It was He who was the deserter. I struggled to believe in Him; I questioned him as an oracle, but there was no answer. He brought me no solution of the problems of life. His avowed followers I found the hardest and most selfish of all. I am inclined to think now my first falling-off was physical. I did not eat or drink enough. There was no one to regulate these things. I might have starved unnoticed. But I fancied my mind became clearer when it was only my brain that was weaker. Gradually the incompetence of the Gospels to provide any rule of life became more and more apparent. Nothing took their place, and I became a Deist. The name of "Deist" was then no better than that of "Atheist" now. To believe in God alone was a creed few Englishmen dared avow. Those were the days when the Athanasian Creed was thought the quintessence of truth and orthodox subtlety. To hint that the Litany was tedious was an absolute crime. Abraham had not yet been called an Arab Sheikh, and to doubt the efficacy of prayer was a proof that the questioner was guilty of some abominable immorality. When I think what advances have been made since I was young, I feel almost reconciled to life; but no, this is the way God has always tantalized me. I must have something more than the gratification of feeling I am beyond my age.

(To be continued.)

CURRENT LITERATURE.

THE MASQUE AT LUDLOW.

The Masque at Ludlow, and other Romanesques.
By the Author of "Mary Powell." 8vo. 8s.
(Sampson Low, Sons, & Co.)

UNDER the first title of this very delightful volume we are introduced by our talented author, in a series of elegant epistles, to some of the members of the Bridgwater family, in whose house at Ludlow, and for whose especial entertainment, John Milton composed his "Masque of Comus." Commencing with a letter, under date "This 30th of June, 1634," from Mrs. Lanfear to Frances Countess of Bridgwater, we learn under what circumstances Milton was induced by his friend, Henry Lawes, "to supply verses tolerable enough for her children to learn by rote, and for me to hang music upon," Lawes naively adding—"The credit will be little or none, the obligation great." Allusion is also made to "the wonderful memory of that rare girl of thirteen—the Lady Alice—that could personate even passably the 'Lady.'"

The Countess, in her reply to Lanfear, says—"My Lord comes down to Ludlow shortly, to take his state in the Presidency. We shall bring down Lawes, and I have desired him to compose something for ye occasion, that shall exercise the children's wits and memories." Hence Lawes seeks the aid of Milton, who consents "on the sole but express condition that my incognito shall be inviolably preserved," and in a subsequent letter he gives concisely the "Theme of our piece," founded upon an incident which had recently occurred to the Lady Alice and her two brothers.

In Letter XIII. Lawes says—"What we shall do for a Comus is now the problem, which you, the arch-magician, may help us to solve. Who could take the part better than yourself? Do come, 'beseech you.'" And he

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does appear in time to relieve them from a difficulty into which at the last moment they are placed by the proposed representative of Comus "having found his way to the sack posset, and taken so much of it on pretence of getting up his courage to play his part, that he was now absolutely disguised with drinking." Preserving his incognito to the last, "when my Lord President calls aloud for Comus, that he may compliment him handsomely, Comus, strange to relate, is nowhere to be found, he has vanished into air, as an enchanter should," but before leaving Milton had warned the Lady Alice thus—"Too much acting will be to you the poisoned cup; shun it, like wine!"

The Masque is followed by a Romanesque, entitled "Immeritus Redivivus," setting forth in seven imaginary letters, addressed by Edmund Spenser "to his very singular good friend, Mr. Gabriel Harvey," Fellow of Trinity College, in Cambridge, "how England's arch-Poet went into ye North Countrie; and what ensued concerning the fair Mistress Rosalind."

If Spenser did not compose the whole of "The Fairy Queen" during this his temporary absence from Court, the argument of the poem is sketched out in Letter V., wherein he writes to "mine own Mr. Harvey, 'tis at your own good pleasure to show or save ye showing of the enclosed bald rhymings to your noble friend," and one of the events described in these letters is to be found in Book VI., Canto 4, where the salvage man—the Limeblossom of this country adventure—rescues Serena from the Knight, much in the same fashion as the wild man is represented attacking our hero, "Immerito," "for accidentally breaking his snares, and spoiling his chance of a dinner." Here follows his description:—

When, o' suddain, from out a hollow tree, there starts me a creature, half man, half fiend, tricked salvage fashion, in leaves and branches twined over and about the poor tattered rags that appeared beneath the foliage. I do protest he had so much of the Faun about him, as that I lookt at his feet to see if they were cloven; but, albeit, he had a hare-lip, he did not divide the hoof, and his uncouth gibbering betrayed him a hopeless bedlamite, rather than an evil creature of sylvan or infernal origin.

And so on for some hundred pages does our author write in the same quaint, yet poetic prose, that we feel grateful, after this perusal, to find Mr. Gabriel did not, as requested by the heart-broken "Immerito," "out of hand to burn every one of the letters written since I came to this place—never hereafter refer to the lady in question. Time, resolution, and the grace of God may cure me: nothing can short of all these three."

The third portion of the book, entitled "The Daughter of Galileo," narrates—in supposed extracts from her Diary, but, unlike the previous pages, in modern English—how, silently nurturing a passion for her father's favourite pupil and her quondam playmate, Vittorino Viviani, she is struck down by the intelligence of his marriage with another.

In the earlier pages of her Diary are, however, inserted the opinions of Galileo on the early Greek astronomers; the prediction of the moon's eclipses by the Chaldeans; on Meton (the Inventor of the Golden number), four centuries and more before Christ, and Anaxagoras, preceptor of Socrates and Euripides:—

He was literally a philosopher—a "lover of knowledge." "He taught the doctrine of a Supreme Intelligence, and was the first Greek who conceived the primary active principle of the Universe to be mind existing apart from, and independent of, Matter." Then followed Calippus, who corrected Meton's cycle six years before the death of Alexander. Then appeared Hipparchus, a patient, intelligent, accurate observer, a man of genius, and he made out the Doctrine of Parallax; but the grand discovery of Hipparchus, upon which Galileo founded his exalted opinion of him, was that of his "Epicycles."

Although we have given the above extract to show how enthusiastically the daughter is supposed to regard the studies of her father, the episode of her sister Ginevra's admission

to the Convent, and the gossip with her nurse—the "Monna Lisa" of that period, serves to relieve what would otherwise prove heavy reading after the letters of Milton and those which have precedence in the volume; and we regard as a very great error that, whilst narrating events which occurred about the same period, the phraseology of that period should be abandoned in this supposed Diary, and the modern style of description adopted. The "bestialissima ostinazione" of the monks and others, who refused to admit the discovery of Galileo, is frequently alluded to, and we close our review of this volume, which we highly recommend, with the following extract—but not from the daughter's Diary:—

Summoned to Rome, he consented to a disgraceful and entire recantation of the facts that were burnt into his very soul. On the 22nd June, 1633, clad in a penitent's sackcloth, the mighty self-relying philosopher and genius fell upon his knees, and, with his hand lain on the Holy Evangelists, declared that he abjured, detested, and would never again teach the doctrine of the sun's stability and the earth's motion. Having confirmed his oath in writing, and promised to perform the enjoined promises, he rose from his knees a pardoned man; and, turning about to one of his friends, stamped on the ground, and pronounced in an emphatic whisper—"EPPURE SI MUOVE."

MORRIS'S EARLY ENGLISH.

Specimens of Early English, selected from the chief English Authors, A.D. 1250-1400; with Grammatical Introduction, Notes, and Glossary. By R. Morris, Esq., editor of Hampole's Pricke of Conscience, etc., etc. (Oxford, at the Clarendon Press; and Macmillan and Co.)

UP to the present time the student of Early English has been under great difficulties at his start. There has been no book to guide him on his road; none to point out, on the one hand, the peculiarities of inflection, construction, and dialect, to be looked out for; and, on the other hand, none to warn him where the blocks he was likely to stumble over lay. A man had to take up such books as he could get hold of, and blunder along as well as he could, sure to find himself tripped-up by some adverb, or genitive in *e*, caught in the trap of two pronouns rushing together and becoming one, or snared in the mazes of some awkward construction whence exit was vain. Moreover, books could only be got with difficulty and at great cost, and few of them had proper glossaries: Sir Frederic Madden's, which have, costing six guineas apiece.

Now, however, the Clarendon Press managers and Mr. Morris have come to the rescue, and produced a book which is grammar, text, and glossary too, for seven or eight shillings, and which, though only a class book, is as carefully and elaborately annotated as if it were one of the most expensive club-books. For out of the 492 pages of which the book consists, no less than 114 are given to notes and glossary, which being in much smaller type represent, in fact, more than a third of the book. We hope this statement may come under the eyes of Messrs. Bell and Daldy, and make them feel sincere repentance at allowing the edition of Chaucer's Poetical Works that Mr. Morris has just done for them, to go out without the collations and notes that Mr. Morris, as an editor of the true breed, would have delighted to add to them. But to return to the volume before us. Mr. Morris has, from the first, been distinguished among all editors of his class by the extreme care he has shown in noting and classifying the specialties of our early dialects; and in the present book he has grouped them all together, and contrasted all three—Northern, Midland, and Southern—in paragraphs, and the Northern and Southern in a table or list, with marked gain to the student. But we hope that in a new edition, the delegates of the press will allow this part of the book to be extended, and the Midland worked into the table with the Northern and Southern. We crave, too, the addition of the Northern and Midland forms all through the outlines of Early English Grammar, which are at present based upon

the Southern dialect only. The additional cost of a shilling or eighteen-pence in the book would be a trifle, compared with the advantage of having the dialectal varieties which Mr. Morris exhibits so ably in the first pages of the book, carried out in detail right through the whole of the declensions and conjugations. As it is, Mr. Morris does give us a few paragraphs here and there on the subject, but it is the scheme of each dialect under one's eye, that conveys the real teaching. This, Mr. Morris shows that he feels, as he has added to every Southern declension and conjugation he gives, the Anglo-Saxon one from which it has degraded; and a more instructive study than this part of his book exhibits, cannot easily be afforded. By way of illustration, too, he has availed himself of such archaisms as still linger in our modern speech, so that under the heading of *Genitive and Feminine Nouns*, you find "from the above declensions of feminine nouns, it is seen that the genitive case is denoted by the vowel *e* and not *es*. Chaucer has *heorte blood heart's blood*; *widewe sone widow's son*; *The Prioress Tale*, the Tale of the Prioress. This rule is well illustrated in the modern terms *Lord's Day* and *Lady Day*, (the day of our Lady, the Virgin Mary.)"

On one inflection of the verb, we hoped for fuller information than Mr. Morris has given us, and that was the *ing* of the imperfect or present participle. Mr. Morris says "the present participle in the Southern dialect ends in *inde*, in the Northern *ande* (*and*), and in the Midland in *ende* (*end*). And in a note, "present participles in *inge*, (*ing*) are not uncommon in the Southern dialect, and the corruption commenced before A.D. 1300." Quite true, but then, what influence had the Anglo-Saxon abstract in *ing* on this corruption; what "the gerundial inflection in *inge*," that Mr. Morris notices, which was often substituted by Southern and Midland writers for that in *enne*, as to *sellenge* for *to sellenne*. Mr. Morris will probably answer that in a Class and Text Book like the present, the discussion of such questions is out of place; his business here is to state results; and this is true, but still we should like to know his views on this *ing*. We also want his opinion on the rise of our standard English from the Midland dialect in Gower's and Chaucer's time.

After treating all the parts of speech, Mr. Morris introduces a set of sentences as Exercises on his Grammar, which contain puts hard to crack, and then begins with his specimens. Arranging these by dialects, we have first, in the Northern, bits of the Metrical Psalter, Cursor Mundi, Sunday Sermons, Hampole's Pricke of Conscience, and Minot's Political Songs. 2. In the Midland, pieces of Genesis and Exodus, Havelok, Brunne's Handlyng Synne, these in the East; Alliterative Poems, Sir Gawayne and the Grene Knight, in the West; generally, Hereford's Psalms, Wycliffe, and Mandeville's Travels, while Chaucer and Gower represent the Midland as our standard language. 3. In the Southern Dialect, extracts from the Owl and Nightingale, Romance of Alexander, Robert of Gloucester, Life of St. Dunstan, Hendyng's Proverbs, Lyric Poetry, Shorham's Poems, Piers Plowman, and Trevisa. The reader, if he knows anything of the subject, will see that every important work of the period 1250-1400, is here represented; and that the texts are carefully annotated and correctly glossed, no one who knows Mr. Morris's other works, or will take the trouble of testing this, can doubt. Open any page at hazard, and you find such information as this given:—

"*Stiward*, steward: Old Norse *stivardr*, from *stjá*. Norse *sti*, domestic occupation; *stia*, to be busy about the house, to take care of cattle. Old Norse *stia*, sheep-house. Cf. Danish *sti*, a sty."

"*Abraid*, awoke; literally to start suddenly. A.S. *bredan*, *bregdan*, to weave, braid, gripe, drive. O.N. *bregða*, in addition to these meanings, signifies to change, to awake out of sleep, start; O.N. *bragð* signifies a quick motion; whence the O.E. *at a braid*, at once, instantaneously. *Up-braid*, is originally, to raise a sudden shout, to accuse. Bailey has the word *bread* appearance, which may be compared with the Pron. E. *braid*

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to pretend, resemble, from the O.N. *bragð* gesture, *bragr* habit, at *braga* to imitate. Shakespeare uses *braid* for manners."

The work is done unstintingly, with the greatest care, and the book does credit to its able editor, as well as the series it is in. From these Specimens the best of our early English editors can learn much, while to the student, they will teach enough to enable him to master the greatest difficulties he will meet with in his after wider range through the rest of our early literature. We hope this book may inaugurate a new era in the study of English historically in schools and Universities and at home, for now that study is for the first time made generally possible. The Professors at our Universities, and English masters at our schools, will hail its appearance with joy, we are sure, and we are glad to learn that the Examiners in English at the University of London, even before the appearance of the book, recommended it to the Council as the text-book for the B.A. examination, being sure that in this, his latest work, the editor of "Hampole" and the "Alliteratives" would not belie his reputation. It was a great compliment, and right well deserved. One word more to the delegates of the University Press. Let them commission Mr. Morris to write an English Grammar as a substitute for the cumbrous and pretentious volumes of very small merit that upper students are now driven to use. We want a book that, besides the general talk now given in grammars, shall trace our pronouns and other parts of speech, and our inflections, through all their successive forms, in our different dialects, till they assume their modern shape, which shall note the changes of construction and phrase that the language has passed through, and shall give dates and examples for all of these things; which shall, in short, exhibit the language historically. There is no such book in the market; one is much wanted, and we know no man in England better qualified to write it than Mr. Morris. Mr. Thring will, we assume, write a mere lower-school book. His present Grammar shows the length of his tether; it is a well-arranged little book, but with many deficiencies, even within its limited range. Mr. Earle's advertised "Philology of the English Tongue" is to be a text-book for upper schools, we are told. The book we want Mr. Morris to do, is one for University men and scholars to use — *The English Grammar*.

THE LOGIC OF CHANCE.

The Logic of Chance. By John Venn, M.A. (Macmillan & Co.)

THE science of Probability has hitherto been treated rather as a branch of mathematics than as a separate study; a circumstance which causes many who enjoy books of close reasoning, to turn with aversion from works on Probability. It is, therefore, with great pleasure that we welcome Mr. Venn's treatise; for it "is in no sense mathematical," and moreover, is original, not merely in the elementation of mathematics, but also in the novelty of its theories; in fact, the author very justly observes, that could he agree with the principles laid down by previous writers there would have been no necessity for his essay. We cannot speak too highly of the arrangement of the work, nor of the simple manner in which it is written; though, perhaps, the author in trying to compress into one volume what might well have been spread over two, has occasionally rendered his meaning somewhat obscurely. This difficulty, however, vanishes with increased attention; and we assure all those who take pleasure in reading such books as Mill's *Elements of Logic*, &c., that they will not only derive satisfaction from following Mr. Venn's reasoning, but also much advantage.

The first part of the work is devoted to the separation of the class of subjects which come within the scope of the formulæ of Probability, from those which are more properly treated by the rules of Inductive Logic; and here

Mr. Venn joins issue with Professor De Morgan and others who have explained the theory of Probability from the mathematicians point of view; indeed, the great merit of the present work consists in the precise way in which the subject is distinguished from all cognate ones. In the latter part he discusses the application of the rules of Probability to Moral and Social Science. The space we can devote to a notice of "The Logic of Chance" renders it impossible that we should do more than briefly touch upon some of the main arguments adduced; and this we trust will prove sufficient to stimulate the curiosity of our readers.

"There is a class of *immediate inferences*, unrecognised indeed in logic, but constantly drawn in practice, of which the characteristic is, that as they increase in particularity they diminished in certainty." The length of a single life is proverbially uncertain, but the average duration of a "batch of lives" is becoming in an almost equal degree certain; we see in this example that "individual irregularity" is combined with "aggregate regularity," or, in other words, we have here "a series of things or events, of the individuals of which we know but little, whilst we find a continually-increasing uniformity as we take larger numbers under notice." This series on examination may be conceived "not as a succession of events happening in different ways, but as a succession of groups," resolvable "into collections of substances and attributes." The "unity to the succession of groups" is produced by the fact that some of the substances and attributes are common to the whole succession; whilst the groups in the succession are distinguished by the fact that some of them contain only a portion of the substance and attributes. The occasional attributes, as distinguished from the permanent, are found on an extended examination to exist in a certain definite proportion of the whole number of cases" . . . "the instances in which they are found to the instances in which they are wanting is gradually subject to less and less variation." The permanent attributes which give the unity to the succession may, for convenience, be termed the "event" and the occasional ones which cause the distinction to the groups in succession, "the way in which it can happen;" e.g., in discussing tables of mortality "the former term would denote the fact of death, the latter the age at which it occurred, or the way in which it was brought about, or whatever else might be the particular circumstance under discussion."

The aggregate regularity referred to above, when examined on a very great scale, is often found to be itself irregular, i.e., the "type" or "mean" is not fixed; though in other cases, such as games of chance, for example, it does seem fixed. This observation induces Mr. Venn to divide the "series" into two kinds. And we would draw particular attention to this point, as it is the chief feature in the new theory, and, moreover, has been greatly overlooked by all previous writers on the subject. The first division he calls "natural uniformities," and as an illustration we may cite registers of death; for though now a certain age, say 35 is the mean to which Englishmen attain, yet a hundred years ago, or a hundred years hence, or even now among savages, this would not be an appropriate limit; from which it may be inferred, "that although statistics are notoriously of no value, unless they are in sufficient numbers, yet it does not follow but that we may have too many of them. If they are too extensive they may again fall short, at least for any particular time or place of their greatest attainable accuracy." Opposed to this class are the "uniformities afforded by games of chance," here no amount of experience, which we need take into account, is likely to alter the fixity of these uniformities. These two classes "are alike in their initial irregularity, alike in their subsequent regularity; it is what we may term their ultimate form they begin to diverge from one another."

In answer to the question: how in any particular case can such a series be obtained? Mr. Venn answers: "By experience alone,

supplemented by the aid of Inductive Logic." This is the first instance in which we find our author at variance with all hitherto existing opinions. The confusion between the two classes of "uniformities," above noticed, has given rise to an *a priori* theory, which on the one hand assumes a "subjective" phase, i.e., that the series in question might be obtained in "the amount of our belief." Now, should the amount of this belief (if it be determinable?) not be based on experience, "it would be admitting Probability was only a branch of Psychology." On the other hand we have an "objective theory," which would warrant our obtaining the series without experience, owing to the uniformity found to be so connected with the physical conditions as to be capable of being inferred *a priori*. This constitution is assumed to exist with the same faculty of development in all cases in which uniformity is observed" (mortality of man, for example) "however little resemblance there may be between them and games of chance, upon which this objective theory is based." It will consequently be seen how the *a priori* theory obscures 1st, the gradual change of type, and 2nd, the distinction between the actual series about which we reason and the substituted series (the ideal one) we employ in reasoning about it.

When the series has been obtained, it behoves us to know how it is to be employed as a means of making inferences. "The series we actually meet with show changeable type, and the individuals of them will sometimes transgress their licensed irregularity. Hence they have to be pruned a little into shape, as natural objects always have before they are capable of being reasoned about. The form in which the series emerges is that of one with a fixed type, and with its warranted irregularities omitted."

"This imaginary or ideal series is the basis of our calculations. We infer the probability, or chance, of an event happening in any particular way by the numerical fraction which represents the proportion between the "permanent substances and the attributes" and "the occasional ones." Thus "let the probability be that of a given infant living to 80. The 'permanent substances,' or 'event,' will comprise all men; the occasional, all who live to 80. Then let the former be to the latter as 100 to 1, and the probability will be 1-100th." This and like instances, which may be regarded as the "formal" rules of inference in Probability, we must pass over, although Mr. Venn disagrees somewhat with the usually accepted theories. However, there are other rules for drawing inferences which he terms "experimental," and which hitherto have been unnoticed. This part of the work, perhaps, is the most important, although it is merely a corollary to what we have already said. It is here that the connection between Induction and Probability is pointed out. In order to give our readers some idea of the views expressed in this section, we will consider the following problem: eight out of ten men, aged 56, will live ten years more; what is the probability of John Smith, aged 56, living ten years longer? Now, in attempting to make real inferences about things yet unknown, it will be found practically that a number of different series, all applicable to the individual, present themselves to the mind, as, for example, in our assumed case: John Smith is a consumptive man, a north-countryman. Being a man, he is also naturally included under the class animal and vertebrates, &c. Now, when he stands before us as an individual, it is entirely arbitrary under which of these aspects we view him; yet, to draw a just conclusion as to his likelihood of living ten years more, it is of the utmost importance that we should refer him to those series only which modify his chance. The process of generalisation of statistics belongs to induction, and precedes, and is independent of, Probability. When the propositions thus obtained assume the form of *universals*, our inferences from them will depend upon the ordinary rules of Logic; however, when the generalisations present themselves as "*proportional propositions*," then, and then only, will the "formal rules"

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of Probability be applicable. As in Deductive Logic we are engaged in discovering appropriate middle terms, so in Probability, when we have many proportional propositions, each referring to the individual in question, as in our example above, it is necessary we should determine to which of them the case at issue is most applicable. This Mr. Venn calls "experimental inferences" as contrary to the "formal"; and offers the two following opposing principles to guide us in our choice:— 1st. "The more special the series the better." 2nd. "If we make the series too special, we shall generally meet the practical objection arising from insufficient statistics." The distinction here drawn between the "experimental" and "formal" inferences appears to us somewhat in the character of the difference between art and science.

We have now briefly glanced over the theory of Probability as presented in the "Logic of Chance;" however, to supplement the very inadequate view thus obtained, we will add a few observations on that part of the work which treats of the application of Probability to Moral and Social Science. We regret, from want of space, not being able to refer to the chapter on "Fallacies," which in itself is worthy of a special notice; nor to the conclusive way in which he shows the unimportance of the distinction between Direct and Inverse Probability; nor to the errors into which Dr. Butler and Mr. Mill have fallen, from not observing that "we are not concerned with time in Probability." Nor to many other points, with which we are not, perhaps, so ready to concur.

From the principles we have discussed, it will follow that the theory and formulæ of Probability are not applicable to "Testimony." The belief we attach to the assertions of any witness is not to be determined by this science; for even if we could "assign a man his place upon a graduated scale of mendacity," a thousand other circumstances which modify our belief in testimony, rush upon our mind, and from their nature cannot be reduced to statistical classification. "We soon know all we can know about the prospects of a man's death, and therefore rest content with the general statistics of mortality; but no one who heard a witness speak would think of appealing to his figure of veracity. The circumstances under which the statement is made, instead of being insignificant, are of overwhelming importance. The appearance of the witness, the tone of his voice, the fact of his having objects to gain, together with a countless multitude of other considerations which would gradually come to light, would make any sensible man utterly discard the assigned average." Inferences drawn from such data, lie outside the confines of the science of Probability. *A fortiori*, the determining the justifiable amount of credence to be attached to miraculous stories, on the statements of witnesses lies, still further from the province of our science. Mr. Venn, in treating this subject, points out that the truth of miracles rests on the belief of creation as a scheme, presided over by a "Providence underlying events." How our belief in design, or a Providential scheme, may be obtained, whether from physical science, from moral or metaphysical grounds, or from Revelation, he offers no opinion; but simply asserts that this belief must be admitted before attempting to discuss the question of miracles. Further on, he adds:—"In fact, it appears to me, that it might be more easy for a person thoroughly imbued with the spirit of inductive science, though an atheist, to belief in a miracle which formed a part of a vast dispensation, as the Christian miracles do, than for such a person as a theist, to accept an isolated miracle." In order to obviate the apparent paradox in this sentence, we presume it might be thus stated: That for a man imbued with the spirit of inductive science, to believe in any given miracle, it will be necessary for him to have previously inferred, from his study of any science or sciences, the existence of a design in creation, or of a Providence underlying events.

With reference to the application of statistics to human actions, Mr. Venn opposes Mr. Mill's views of sociology, and shows that such a science is impracticable, in fact suicidal; that the foretelling any event would cause such disturbance, on the part of the observer, in the foretold events by his own interference, that an opposite result might ensue to that predicted. However, this subject has been previously discussed at great length by our author in *Fraser's Magazine* for May, 1862, so that we must be pardoned for entering upon the subject here. In conclusion, we must refer our readers to the book itself; it is a work evidently the result of the study and labour of years.

LOWELL'S BIGLOW PAPERS.

The Biglow Papers. Second Series. 12mo, pp. 258. (New York, Ticknor & Fields; London, Trübners.)

AN American critic should be heard upon such genuine home productions as those of Mr. Lowell. The *New York Tribune* shall do him justice:—

Mr. Lowell's fund of the Yankee vernacular is as genuine and inexhaustible as his perennial vein of mingled humour and common sense. No writer has ever used the quaint, uncouth, and unmanageable dialect of the New-England farm-houses with such rich comic effect, or has shown such a quick sense of the imagination and pathos of which it is often the unconscious vehicle. He has picked up the queer, racy expressions as they fell alive from rustic lips at cattle shows, town meetings, militia musters, and county courts, and they lose nothing of their vitality when preserved on the written page of a man of such scholarly culture and fastidious tastes. His application of this language, in the present series, to the great political questions of the day is incomparable for its happy verbal turns and its cutting satirical edge. The truth which he tells is of the plainest kind, and it comes with twice the force to the people for being spoken in the tongue that is so natural to their ears in the corn-field, in the pine woods, or with a mug of cider and a dish of apples in talking politics before the winter's fire. In a word, Mr. Lowell follows the advice which Parson Wilbur so shrewdly gave to Hosea Biglow, and thus his Doric strains have found an echo throughout the land:—

Mistur Wilbur, sez he to me onet, sez he, "Hosea," sez he, "in litterytoor the only good thing is Natur. It's amazin' hard to come at," sez he, "but onet git it an' you've gut everythin'." Wut's the sweetest small on airth?" sez he. "Noomone hay," sez I, pooty bresk, for he wuz allus hankerin' round in hayin'. Nawthin' of the kine," sez he. "My leetle Huldys breath," sez I ag'in. "You're a good lad," sez he, his eyes sort of ripplin' like, for he lost a babe onet nigh about her age,—"You're a good lad; but 't ain't thet nuther," sez he. "Ef you want to know," sez he, "open your winder of a mornin' et ary season, and you'll larn that the best of perfoms is jest fresh air, *fresh air*," sez he, emphysizin', "athout no mixtur. Thet's wut I call natur in writin', and it bathes my lungs and washes 'em sweet whenever I git a whiff on 't," sez he. I often think o' thet when I set down to write, but the winders air so ept to git stuck, an' breakin' a pane costs sunthin'.

It is quite superfluous to give our readers a taste of "Hosea's" verses, which are now so much at home in every Yankee household, but we must have the pleasure of a laugh with them at least over a portion of the "last perduction of his mews." It is from a speech that Hosea professes to have delivered before the last March meeting in "our taown."

We've gathered here, ez ushle, to decide Which is the Lord's an' which is Satan's side. Coz all the good or evil that can heppen Is 'long-o' which on 'em you choose for cappen.

[Cries o' "Thet's so!"]

My frien's you never gathered from my mouth, No, not one word ag'in the South ez South, Nor th ain't a livin' man, white, brown, nor black, Gladder 'n wut I should be to take 'em back: But all I ask of Uncle Sam is fust

To write upon his door, "No goods on trust";

[Cries of "Thet's the ticket!"]

Give us cash down in ekle laws for all An' they 'll be snug inside afore nex' fall. Give wut they ask, an' we shell hev Jamaker, Wuth minus some conside'able an acre: Give wut they need, an' we shall git 'fore long A nation all one piece, rich, peaceble, strong; Make 'em Amerikin, an' they 'll begin To love their country ez they loved their sin; Let 'em stay Southun, an' you 've kep'n sore Ready to fester ez it done afore. No mortle man can boast of perfic' vision, But the one moleblin' thing is Indecision, An' th' ain't no futur' for the man nor State Thet out of j-u-s-t can't spell great, Some folks 'ould call thet reddikle; do you? 'T was commonsense afore the war wuz thru; Thet loaded all our guns an' made 'em speak So 's't Europe heard 'em clear across the creeks "They 're driven' o' their spiles down now," sez she "To the hard Grennit o' God's fust idee; Ef they reach thet, Domoc'ey need n't fear The tallest airthquakes we can git up here." Some call 't insultin' to ask ary pledge, An' say 't will only set their teeth on edge, But folks you 've jest licked, fur'z I ever see, Are 'bout ez mad 'z they wal know how to be; It's better than the Rebs themselves expected 'Fore they see Uncle Sam wilt down henpected; Be kind 'z you please, but fustly make things fast, For plain Truth's all the kindness thet 'll last; Ef treason is a crime, ez some folks say, How could we punish it a milder way Than sayin' to 'em, "Brethren lookie here, We 'll jes' devide things with ye, sheer and sheer, An sence both come o' pooty strongbacked daddies, You take the Darkies, ez we 've took the Paddies; Ign'ant an' poor we took 'em by the hand, An' they 're the bones an' sinners o' the land." I ain't o' them thet fancy there 's a loss on Every inves'ment thet don't start from Bos'on; But I know this: our money's safest trusted In sunthin', come wut will, thet *can't* be busted, An' thet 's the old Amerikin idee, To make a man a Man an' let him be.

[Gret applause.]

Hosea pays his compliments to the national Secretary of State in language more expressive than polite:—

Ez for their l'yalty, don't take a goad to 't, But I do want to block their only road to 't By lettin' 'em believe thet they can git Mor 'n wut they lost out of our little wit: I tell ye wut, I'm 'fraid we 'll drif' to leeward 'Thout we can put more stiffenin' into Seward; He seems to think Columby 'd better ect Like a scared widder with a boy stiff-necked Thet stomps an' swears he wunt come in to supper; She mus' set up for him, ez weak ez Tupper, Keepin' the Constitootion on to warm, Tel he 'll eccept her 'pologies in form: The neighbors tell her he 's a cross-grained cuss Thet needs a hidin' 'fore he comes to wus; "No," sez Ma Seward, "he 's ez good 'z the best, All he wants now is sugar-plums an' rest;" "He sarsed my Pa," sez one; "He stoned my son," Another edds, "O, wal, 't wuz jest his fun." "He tried to shoot our Uncle Samwell dead." "T wuz only tryin' a noo gun he hed," "Wal, all we ask 's to hev it understood You 'll take his gun away from him for good; We don't, wal, nut exac'y, like his play, Seein' he allus kin' o' shoots our way. You kill your fatted calves to no good cend, 'Thout his fust sayin' 'Mother, I hev sinned!'"

With regard to the whole question of reconstruction, Hosea is still on the anxious seat, and fears that the settlement may be hurried up with too much speed for the good of the country. He enforces his views with an apologue which shows that the Yankees still have an *Æsop* among them:—

I knowed ez wal ez though I'd seen 't with eyes That when the war waz over copper 'd rise, An' thet we 'd hev a rile-up in our kettle 'T would need Leviathan's whole skin to settle; I thought 't would take about a generation 'Fore we could wal begin to be a nation, But I allow I never did imagine 'T would be our Pres'dunt thet 'ould drive a wedge in To keep the split from closin' ef it could, An' healin' over with new wholesome wood; For th' ain't no chance o' healin' while they think Thet law an' gov'ment 's only printer's ink; I mus' confess I thank him for discoverin' The curus way in which the States are sovereign; They ain't nut *quite* enough so to rebel, But when they fin' it 's costly to raise h—.

[A groan from Deac'n G.]

Why, then for jes' the same superl'tive reason, They 're most tu much to be tetched for treason;

They *can't* go out, but ef they somehow *du*
Their sovereignty don't noways go out tu;
The state goes out, the sovereignty don't stir;
But stays to keep the door ajar for her.
He thinks secession never took 'em out,
An' mebbly he 's corree', but I misdoubt;
Ef they war n't out, then why, 'n the name o' sin,
Make all this row 'bout lettin' of 'em in?
In law p'r'aps nut; but there 's a diff'rence, rather,
Betwixt your mother-'n-law an' real mother.

[Derisive cheers.]

An' I, for one, shall wish they'd all been *som eres*.
Long 's U. S. Texes are sech reg'lar comers.
But, O my patience! must we wriggle back
Into th' ole crooked, pettyfoggin' track,
When our artil'ry-wheels a road hev cut
Stret to our purpose, if we keep the rut?
War 's jes' dead waste excep' to wipe the slate
Clean for the Cyph'rin' of some nobler fate.

[Applause.]

Ez for dependin' on their oath an thet,
'T wun't bind 'em more 'n the ribbon roun' my het;
I heard a fable once from Othniel Starns,
That pints it slick ez weathercocks do barns:
Onct on a time the wolves hed certing rights
Inside the fold; they used to sleep there nights,
An' bein' cousins o' the dogs, they took
Their turns et watchin', reglar ez a book;
But somehow, when the dogs hed gut asleep,
Their love o' mutton beat their love o' sheep,
Till gradilley the shepherds come to see
Things warn't agoin' ez they'd ough' to be;
So they sent off a deacon to remonstrate
Along 'th the wolves an' urge 'em to go on straight;
They did n' seem to set much by the deacon,
Nor preachin' did n' cow 'em, nut to speak on;
Fin'ly they swore thet they'd go out an' stay,
An hev their fill o' mutton every day;
Then dogs an' shepherds, after much hard dammin'.

[Groan from Deac'n G.]

Turned tu an' give 'em a tormented lammin'
An' sez, "Ye sha' n't go out, the murrain rot ye!
To keep us wastin' half our time to watch ye!"
But then the question come, How live together
'Thout losin' sheep, nor nary yew nor wether?
Now there wuz some dogs (noways wuth their keep)
Thet sheered their cousins' tastes an' sheered the
sheep,

They sez, "Be gin'rous let 'em swear right in,
An' ef they backslide let 'em swear ag'in;
Jes' let 'em put on sheepskins while they're swearin'
To ask for more 'ould be beyond all bearin'."
"Be gin'rous for yourselves when *you're* to pay,
Thet's the best prectice," sez a shepherd gray;
"Ez for their oaths they wun't be wuth a button,
Long 'z you don't cure 'em o' their taste for mutton;
Th' aint but one solid way, howe'er you puzzle:
Tell their convarted let 'em wear a muzzle.

[Cries of "Bully for you!"]

Mr. Lowell prefaces the volume with a curious disquisition on the dialect in which it is written, accompanied by some brief personal notices which have almost an autobiographical interest. The first of the series of "Biglow Papers" was begun more than twenty years ago, with no definite plan and no intention on the part of the author of ever writing another. No one was more astonished than he at the success of the experiment. He found that he held in his hand a weapon instead of a fencing stick. While as an author under his own name he was less known than many poets (of far inferior merit, we hardly need add), the verses of his pseudonym were everywhere copied. They rushed into instant and wide popularity were pinned up in workshops, repeated in bar-rooms, quoted in stage-coaches, and their authorship debated with as keen a zest as had been that of the Waverley novels. Some wiseacres even went so far as to demonstrate, in the hearing of the author, during the pauses of a concert, that he was wholly incompetent to have written anything of the kind. The event has signally illustrated the absurdity of such precipitate judgments, although one might perhaps be excused for failing to see in the singular refinement and subtle delicacy of his earlier poems, the germ of the hard, robust, homely sense, and the terribly caustic satire which find a mouthpiece in the indignant and fiery Hosea. We certainly have never seen his like before, and never shall see his like again, and hence our sorrow is the greater at the announcement that we are to hear from him no more, that this "perduction is goin' to be the last, an' stay the last, onless sunthin' pertikler sh'd interfeare which I don't expect ner I wun't yield tu ef it wuz ez pressin' ez a deppity sheriff."

INDIA AND ITS CLOTHES.

The Textile Manufactures and the Costumes of the People of India. By J. Forbes Watson, M.A., M.D., &c., Reporter on the Products of India to the Secretary of State for India in Council. Printed for the India Office. Imperial 4to, with numerous Coloured Photographs. £3 5s. (Allen & Co.)

WHEN the iron-masters of Belgium are under-bidding our own, and the mines of Cornwall, which have yielded a staple commodity ever since the Roman occupation, are being abandoned, apparently for ever, the chance of opening up a new branch of manufacture may fairly expect more than ordinary attention. To clothe the world has always been an object of British ambition. Yet our manufacturers have hitherto made no effort to provide garments for the two hundred millions of souls who form the population of what we call India. Perhaps they have some idea that the majority of that population wear what might be called no clothes at all. Perhaps they think there is no possibility of making such garments as they do wear cheaper than India can make them for herself. The latter supposition is the better founded of the two. There are certain fabrics which will probably always be best and most cheaply manufactured by hand. The loom-made brocades and the hand-embroideries of India, the shawls and the Carpets, will never be surpassed, or rivalled either in beauty, or in cheapness. But the customers for these can be numbered; it is to the hundreds of millions the British manufacturer must look for profits. The plainer and cheaper stuffs of cotton, or of cotton and wool together, are those he has the best chance of selling, and which he may be able to sell largely if he can suit the requirements and tastes of the people he seeks to please. It is to facilitate an enterprise of this kind that the not less useful than magnificent volume which lies before us has been prepared by the India Office.

For some time past, ever since the removal of the India Museum from Leadenhall Street to Fife House, considerable labour has been bestowed in the endeavour to utilise the collection so as to make it not only afford evidence of the productions of the country, but to exhibit, in an intelligible form, what products and manufactures are available for export, or capable of improvement; to suggestively illustrate what kind of material the inhabitants wear or otherwise consume; and, in short, to assist in extending the commercial relations of the two countries. The Museum contains many objects of historic, philosophic, and scientific interest. Amongst the latter will be reckoned by some the series of photographs which are being arranged in the entrance-hall. This is a selection from portraits of 1,200 different individuals, and was originally commenced for anthropological purposes. But we are now concerned with its commercial value. It shows the costumes of the people. "It presents the manufacturer with a correct idea of the *function* of the different portions of the articles of dress used by them, giving the reason for the introduction of ornamentation at certain parts and not at others." The whole of this series is now being re-produced, and copies are to be presented to the different institutions in this country. 500 negatives and 50,000 copies have been taken during the past summer in the *Photographic Branch* of the department. This work, with its descriptive text, is being brought out by Dr. Forbes Watson, and Mr. Kaye. There is besides a gigantic undertaking in progress, and one which only the power of a Government could effect:—

Specimens of all the important textile manufactures of India existing in the stores of the Museum have been collected in eighteen large volumes, of which twenty sets have been prepared, each set being, as nearly as possible, an exact counterpart of all the others. The eighteen volumes, forming one set, contain 700 specimens, illustrating, in a complete and convenient manner, this branch of Indian manufactures. The twenty sets are to be distributed in Great Britain and

India—thirteen in the former country and seven in the latter—so that there will be twenty places, each provided with a collection exactly like all the others, and so arranged as to admit of the interchange of references when desired. Each sample has been prepared in such a way as to indicate the character of the whole piece from which it was cut, and thus enable the manufacturer to reproduce the article if he wishes to do so. In other words, the eighteen volumes contain 700 *working samples or specimens*. The twenty sets of volumes may thus be regarded, as *Twenty Industrial Museums*, illustrating the textile manufactures of India, and promoting trade operations between the East and West, in so far as these are concerned.

It is not to be supposed, however, that even such Museums as these would enable the manufacturer to surmount all difficulties; but he must expect sometimes to have to apply to the present collection. "It was necessary that he should know how the garment was worn, by which sex, and for what purpose—how, in short, the people were clothed, as well as the qualities of the fabrics they used. It was further necessary that he should know why certain arrangements of ornamentation were adopted, as well as the styles of ornamentation and the materials employed." It is information on these points, and similar ones, that the volume before us is intended to supply. But perhaps the introduction will speak best for itself:—

It is shown that a very large proportion of the clothing of the people of India, whether Hindu or Mahomedan, consists of articles which are untouched by needle or scissors. These articles leave the loom in a state ready to be worn, and have their analogues in our shawls, plaids, and scarfs. The principal of these are the turbans, loongees, and dhoties worn by men, and the sarees worn by women. The dhotie is nothing but a scarf folded round the loins and brought up between the legs, and this constitutes the whole clothing of a large number of the lower and poorer classes. The loongee, again, is a similar but larger scarf or plaid, worn over the shoulders and upper part of the body. The turban is a longer and narrower scarf, which is folded round the head to form a head-dress. The saree, or woman's plaid, is used to cover both the body and the head. Loongees, dhoties, sarees, and turbans have each different functions, and the quality of the fabric must fulfil these; they have appropriate lengths and breadths, and these must be considered; they have suitable modes or styles of ornamentation, and these, too, must be kept in view. In order to enable the manufacturer to do this easily and successfully, the 700 specimens have, in the present work, been arranged in groups; thus turbans have been considered separately, and then loongees, and so on. These large groups have been again subdivided, and the basis of this subdivision has been the quality of the body of the garment, the material of which it is made, the mode of ornamentation, &c. Thus, loongees made of cotton are not associated with those made of silk; nor are those in which gold thread is used for their decoration, conjoined with those in which coloured cotton or silk is so employed. This work, therefore, may be regarded as an analysis of the contents of the eighteen volumes, and a classification of them according to function, quality, material, and decoration. Many important facts stand saliently out as the result of this analysis; such, for instance, as that by far the larger proportion of the clothing of the people of India is made of cotton; that there are certain colours or tones of colour which are favourites; that gold is largely used in the ornamentation of all sorts of fabrics—cotton as well as silk; and that in the decoration of every garment, regard is always had to the special purpose which that garment is intended to fulfil. Indeed, the modes of ornamentation are so peculiar and so characteristic, that it will often be found that nothing beyond a difference in this respect separates one group from another. Too much attention cannot be given to this point. A piece of cloth may be offered for sale whose length and breadth and quality may fit it admirably for a turban or a loongee, yet it may prove utterly unsaleable because its decoration is unsuitable and injures its usefulness; or because it is not in good taste from the Indian's point of view; or, further, because its colours are not fast and will not admit of the constant and rough washing to which his clothing is subjected. It must not be thought that the taste of India takes delight in what is gaudy and glaring. No one will study the contents of these volumes and come to that conclusion. On the contrary, there will be found there good evi-

dence that Indian taste in decoration is, in the highest degree, refined. Such combinations of form and colour as many of these specimens exhibit *every-one will call beautiful*; and this beauty has one constant feature—a quietness and harmony which never fail to fascinate. This also can be said of it—there is no waste of ornamentation, which is present where it should be, and absent where it should not be. The portions which are concealed when the garment is on the wearer are rarely decorated; nor is there any of that lavish expenditure of ornament which so often purchases *show* at the expense of *comfort*. It is in obedience to this principle that the decoration of these loom-made garments is nearly always confined to one or both ends, or to one or both borders, according to circumstances. We trust that the importance of this class of Indian garments has been made as clear as it should be. We refer to *those garments which leave the loom ready for wear*—the turbans, loongees, dhotees, and sarees, which bear a certain resemblance to our shawls, plaids, and scarfs, though they by no means serve the same purposes. The photographs interspersed throughout the work fully illustrate the various modes of wearing them. It cannot be too often repeated that they constitute a large portion of the whole clothing of the people; and it is clear that the nation which desires to supply that clothing can only be successful in doing so by offering garments of this character for sale. But while they constitute a large portion they by no means constitute the whole. In all times—past and present—Mahomedans have worn vestments made out of piece-goods by the aid of scissors and needles, and Hindus have been long and increasingly following them in this respect. Jackets, coats, and trousers are worn by men; and bodices, trousers, and skirts or petticoats, by women. These are not made as they are with us in Europe, but, nevertheless, they may appropriately enough go by these names. Many of the photographs are inserted to show the various styles of these vestments, and the volumes contain numerous specimens of the piece-goods out of which they are made.

Such is the first notice we think it right to give of a book which contains much about the social antiquities, as they may be called, of the people of India; much about the racial distinctions of dress and customs; much about art; and much which is of use only to the manufacturer, and even the small tradesman, and hand-loom weaver. We shall recur to it more than once again. Its size and price will place it beyond general reach; and therefore extracts from the compilation will be all the more welcome to those who know of how much importance "the philosophy of clothes" is to the history of mankind.

PERU.

Our Artist in Peru. By Geo. W. Carleton. (New York, Carleton; London, S. Low, Son, & Co.)

ON a plain cover is found stamped, in bold letters, *OUR ARTIST IN PERU*, and inside a ring is the outline of some non-descript bird (which figure is attached to each of the drawings). We open the book, the paper and printing of the title-page is good, from which we learn that we are to see fifty drawings on wood, being leaves from the sketch-book of a traveller during the winter of 1865-6, by Geo. W. Carleton, author of "Our Artist in Cuba," &c. We continue our investigations, and perceive a long list of contents. Then come two pages called "a preliminary word," redolent of a mixture of fine, but, it must be confessed, very short observations, intended to be laconic; but they come into the category of angular *smartness*. We speak with confidence, knowing well the localities under consideration. Viewing the paramount patriotic feeling of the citizens of the again United States! and their war-whoop, "America for the Americans," viz., that the citizens of the United States *guess* they are to be, first the conquerors and then the rulers of the New World, our first glance at the drawings seemed to tell us that fire and sword was not to do the work for Peru, but ridicule; or that the artist had been employed by the Government of Isabella II. of Spain to render obnoxious the descendants of the Children of the Sun. However, if the author really went on his own

hook, he has made a most miserable failure of his talents.

The reunited States have had their little "difficulties" with Peru, which the Peruvian "almighty dollar" has settled. Then as to the Hidalgos of Old Spain, they certainly went, not long since, like the thief in the night, and took possession of the Chincha Islands, and only gave them up after receiving some five millions of dollars. The Spanish Buccaneers then bombarded the defenceless City of Valparaiso, after which they tried to do the same for Callao, the port of Lima; but were beaten off most ignominiously. Thus Peru ought to stand in a respectable position as regards Jonathan and Figaro. In the first drawing the author is delineated, with an impudent stare, hands in pockets, astride, and in his own estimation a Colossus, surrounded by packets of pickles, ice, ale, codfish, blue pills, nux vomica, champagne and cloroform, as preventives to sea-sickness. Bad as this sketch is, as a work of art, it is about the best as portraying Yankee character of self-importance. The arrival at Aspinwall, or rather Colon, crossing the Isthmus, Panama, and a sketch of the Cathedral (?) of Taboga are poor and meagre. After giving the pencil sketch of the little one-story Cathedral (?) of Callao, which the earthquakes have so frantically and so vainly tried to swallow up or tumble down, the artist might have given a view of the castles of Callao. Surely the Spaniard fled to the right about whilst he was there. The attempt at fun, supposing the waiter at the hotel in Lima to be a descendant of Rolla the Peruvian and the Peruvian cook, is lamentable. Had the artist not had his wife with him and a female *mutual friend*, he might have enjoyed lovely *romantic reveries*, but the sketches of the sad reality and wants are outrageous libels. He gives one pretty face, "Ladies' style at the theatre." We might say much more about this extraordinary book, but must conclude, perhaps having already said too much in the interest of our columns by observing that it is a great mistake as a caricature and in an artistic point of view.

THE ROB ROY.

The Rob Roy on the Baltic: A Canoe Cruise through Norway, Sweden, Denmark, Sleswig, Holstein, the North Sea, and the Baltic. By S. Macgregor, M.A. With numerous Illustrations, Maps, and Music. 8vo., pp. viii.—312. (Sampson Low & Co.)

TO "astonish the natives" was once the especial delight of every Briton. When the Continent was first opened, as our fathers used to say, in 1815, this was commonly done by playing the Magnifico, scattering cash about in a reckless way, and setting at defiance all laws and customs that we did not understand. These tricks have long since been abandoned, and no man loves to travel now more economically than your Englishman. But the old passion of causing "astonishment" is as powerful as ever, though the way of gratifying it is very different. Not only is the point how to do it as cheap as possible, but the tourist harbours the further intention of turning a penny out of the affair by describing his adventures, and actually being paid for making a trouble of a pleasure. Amongst the most successful of those who have achieved so apparently an inconsistent result, has been Mr. Macgregor. The "Canoe Book" ran through four editions; whether it has been translated into as many languages we do not learn, but such a notoriety is alone a good reason why the author should try fresh ground on which to repeat the experiment. Fresh ground we said, but we meant fresh, or rather, for here we are tripped up again, salt, water. Of course, a stouter boat was wanted than before, and the experience of a thousand miles could have been ill-appreciated if it had not suggested some important improvements in build, stowage, sails (eight sets were made before the final fit), deck, and paddle. But though the "Rob Roy" was thus another, the crew was the same. Both took their places on a London steamer, and landed at Christi-

ania, on the 2nd of August, 1866, and these were their intentions:—

Any one may see by the map that Norway and Sweden are covered with an entanglement of water in rivers, lakes and pools, netted together all over the broad surface for a thousand miles, and we have resolved to push our way through these seas and streams somehow or other, right away to Stockholm.

Much of this route had never been traversed by any boat, for the excellent reason that it was impossible. Of course, therefore, maps were no use; nor can you inquire your way, for "there is nobody to inquire from." All this part, in other respects, presented much the same incidents that were met in the former tour—"shallows to wade in, falls and weirs to lower the canoe over, trees to stoop under, rapids to dash through, and then the novel times with the logs of timber." Then all this disappeared, and the "Rob Roy" by this time in Sweden, entered a long chain of lakes "of all varieties in size, shape, and depth, in colour and kind. . . . Rocks covered with spruce, larch, and beech, and of every shape and curve, with bays, promontories, and islands, opened in gradual panorama as we passed along; and a gladsome buoyancy of spirit in the fine fresh breeze, forced me to shout and sing aloud and alone, or to whistle in bright merriment gaily, by the hour. Life of any other sort seemed tedious compared with this, and travelling in any other way, a bore."

It must not be supposed that these lakes afforded a continuous course all the way to Stockholm. Still the "Rob Roy" had to be ferried over rapids, or take a berth on board many a friendly steamer. Provisions had to be foraged for, and when the raw material was obtained it had to be cooked; and this essential point in the education of the crew of the "Rob Roy" seems to have been forgotten. A spirit-stove, indeed, had been provided, but all it could turn out was, after many trials, soup, chocolate, tea, and coffee; "and the crew soon became accustomed to eat raw fish when they saw other people eating it with gusto." We admire the philosophy; but our satisfaction at catching a "nine-pound grayling" even on the "Motala Ström" would be considerably dashed if we were expected to eat him as he was: and we endorse the reflection caused by swallowing chocolate made with muddy water. "The palate may be trifled with, but in a voyage of this sort the stomach will stand no nonsense. Forced to work hard all day, this important department insists on good food, or it will strike."

The passage across Sweden lasted three weeks, and was diversified by every sort of incident. The "natives" were decidedly astonished, but were always ready to help on every possible occasion, both in season and out of season. The fame of the boat preceded it, as it could not well help doing. Everybody had heard of it, and everybody wished to see it. Here is one scene amongst many:—

Crowds gathered to see the canoe on the deck of the "Gotha," and a regular stream of visitors came up one stairs and went down the other, pacing slowly round the little craft, peering into it, measuring with tapes and foot-rules, lifting it, patting it, rubbing it, and then always settling on the flag; but at that point the marine on duty always said "paws off," which the Swedes will hereafter understand means "don't touch." They were amused to see me lay in provisions for three days (that would be, of course, on very short rations), so that if the west wind then blowing should increase, and by any accident we might be blown off land, our little shipload would possibly reach the Russian coast, at any rate.

The remarks of the captain of the "Rob Roy" on Sweden and the Swedes are almost as rambling as the course of the boat itself; and without the aid of the little maps we should find it very difficult to make out where the little ship went unless we gave the "log" the same minute attention with which we follow the discovery of the North West Passage, or the Antarctic Continent. Though the "triple brass" of the Captain induced him to buffet it a little on the Baltic, he soon transferred

himself to the deck of a steamer, and in that prosaic conveyance arrived at Copenhagen. From thence to Holstein and the scene of battle. The good behaviour of the Prussian conquerors evidently won the heart of Mr. Macgregor. He cannot praise them too much. Thus:—

Sonderburg is a very pretty place, far too lovely for a bloody battle field, and battered houses and trees scarred with shot, and mangled corpses on the ground. The Prussian garrison of 1,600 men filled that large square building by the water's edge, and sentries are all round us, while every hill has its forts, and newly-patched houses show where the cannon told on the hapless town. The town is a thriving one, and the people seem very merry under their invasion; indeed, there is more of whistling and singing here than we have remarked for the last two months.

We have also an interesting illustration of the cemetery of Duppel, with this description of it:—

Here is a Prussian grave—a stone obelisk with a railing round it, and immortelles hanging in the wind, while the inscription reads:—"Hier ruhen 25 tapfere Preussen," and near it one of the Danish tombs—a huge stone block with only one side polished, and not so likely to be carried off for a doorstep, or to face the corner of a bastion, as a squared edge stone would be. There are no wreaths about it, but in golden letters which glitter in the sun, it tells us, "Hier ruhen 209 tapfere Danen. Sie fielen am 18 April, 1864." In many other places were those signs of battle days which last so long in an unmistakable green colour of the grass; and I recollect having noticed this very distinctly on the field of Culloden in 1845, just one hundred years after the bloody battle there.

This latter part of the book is excellent. Mr. Macgregor appears to have thought, wisely enough, that the reader must be perfectly satisfied by this time of the capacities of the "Rob Roy" and the pluck of its crew, so he rather drops the autobiographical, and shows us that he would have had plenty to say if he had taken an ordinary excursion ticket:—

For yachting the isles of Denmark are better than the Mediterranean. "Sailing among the Greek islands" is far nicer to read of than to do, as I know by experience—such bad anchorage, bad water, shifty winds, and long stupid calms, Greek pirates, quarantine, &c., &c. But up here in the fresh air of the north you are among free people and a sailor population, with good harbours and islands lively and lovely—up with the sail cheerily. Through mazes of them we come to Flensburg, which is high up a beautiful creek in the mainland—if, indeed, we can call any part of Denmark mainland—for the Eider cuts it right across.

But we give the preference to his description of Heligoland. It is short, like the island itself. It is practical, for he by no means desires to give it up on the "nationality" principle to Denmark or Prussia. He thinks England should keep it; first because we want it; secondly, because we govern it well. In all respects but one—let those who declaim against Baden-Baden and Hombourg think of this:—

Gambling is allowed in this island, and to hear this startled me; but it was explained that there is an "enormous national debt" of £7,000, and as England, which receives nothing from the island, objected to pay this, and so to stop the *rouge et noir* (a main source of revenue), there was nothing for it but to allow the people to gamble on for eight weeks every year until 1871, when it is believed that the debt will be liquidated.

We have space for but one extract more. It is in Mr. Macgregor's very best style:—

During the three days we spent here the sensation of "incongruity" was most powerful. A charming island quite neglected. An English land full only of foreigners. A rock with wooden houses. A poor town with rich visitors. A splendid beach without a pier. The airiest of nests with drains so foul. Crowds of thinking Germans but only one book-shop. Planks for pavement where no tree grows! One church, one school, a good brass band, and a beautiful glee chorus. What a neat, little, pretty, open, confined old-fashioned, interesting, neglected place to be sure! A huge fortune might readily be made by investing capital here. This little ruby in the green sea could be set off with gold as a gem.

The British Association for the Advancement of Science. Nottingham Meeting, August, 1866. Report of the Papers, Discussions, and General Proceedings. Edited by Wm. Tindal Robertson, M.D. (Nottingham, Forman, London: Hardwicke.)—Much of the contents of this volume consists of the daily reports of the Meeting which appeared at the time in the columns of a Nottingham daily paper, and these have been reproduced so faithfully that the description of the meetings is given here, also, in the present tense. Such being the case, it is needless to say this is no accurate and verbatim report of the scientific papers; the Editor does not pretend for a moment that it will compete with the annual volume issued by the Association itself. The intention, probably, was to publish as early as possible a compilation of the reports mentioned, supplemented by such assistance as could be procured from the scientific and literary weeklies which appeared before the volume could be brought out, with such corrections as the authors of the papers themselves were willing to extend. Above all, the main point was to get the volume out quickly. This intention has, unfortunately, been frustrated by the illness of the Editor, and we fear must stand in the way of any profit he might have expected from the undertaking. The report itself is prefaced by an Historical Sketch of the British Association, and of the town of Nottingham; and short Biographical Sketches of the Presidents. These are very handy, for we do not know that we can find such information in so small a compass elsewhere. The book is printed in double columns, and is very cheap. It is not likely that the authorised Report will appear for the next six months; and though the interest of the Meeting has a good deal died away, we hope there is sufficient left to remunerate Mr. Robertson for the care and anxiety he has gone through.

Hobson's Choice. By Dutton Cook. (Sampson Low, Son, & Co.)—A picture of very ordinary life is "Hobson's Choice," but it is true in its pictures, and most amusingly written. The hero, Frank, a barrister, innocent of briefs, is introduced to us at the commencement of the long vacation; most of his friends are away enjoying themselves, and his solitary life in chambers becoming unbearable, he runs down to Beachville, to spend a few days with a maiden aunt, a lady whose character somewhat resembles Miss Livingstone in "Lewis Arundel," but a little less frigid. Here he meets with a cousin, and another young lady, and, notwithstanding the wealth and beauty of his cousin, whose amiability and sterling qualities his aunt is for ever advocating, Hobson's choice is the little friend. The Curate of the parish is another well-drawn character, a most upright, religious, and well-conducted young man, the very paragon of a clergyman, but who, much to his annoyance, is recognized by Hobson as "a man of our year, known as betting Barlow." This worthy and the fair cousin are clandestinely married, much to the horror of the aunt, who immediately alters her will, and condescends to kiss her nephew, a thing she had not done since he was a small boy. The end of the story finds Frank married, and very happy, and neither himself or his once stern relative regret "Hobson's Choice."

CORRESPONDENCE.

THE ELECTRIC TELEGRAPH.
To the Editor of THE READER.

Sir,—Your correspondent, "Matter-of-Fact," says, in a late number of THE READER, the article on the electric telegraph in the *Saturday Review* "does earnest justice to Mr. Ronalds' modest merit, but it is falsifying scientific history to call Mr. Ronalds the original inventor of the electric telegraph, even though it be done on Mr. Wheatstone's testimony, whose object in giving it is thus stated by the *Saturday Review*:—"In a pamphlet, Mr. Cooke had asserted that he had himself separately invented the telegraph, and Mr. Wheatstone had replied by denying the claim, on the ground that in 1823 the principle had been developed completely and effectually by Mr. Ronalds." Cooke had insisted on his exclusive right to the honour, but Wheatstone (baffled, after a twelve years' struggle to keep it to himself, had in despair) set up a preferable title in Ronalds."

A new and distinctive sub-variety of the "Genus Professor" is neatly defined in the above extract, the variety itself having been first established, and named by Kingsley in his "Water-Babies":—

"Professor Ptthmlnsprts was a worthy little old gentleman—a very wise man, indeed—he had only one fault, which cock-robins have likewise—when any one else found a curious worm, he would hop round him, and peck him, and set up his tail,

and bristle up his feathers, just as a cock-robin would, and declare that he found the worm first, and that it was his worm; and, if not, that then—it was not a worm at all," or (in the new sub-variety just established), "the worm belonged to somebody else."

Some may think they could prove that the Professor Ptthmlnsprts, of King's College, belongs both to the variety and sub-variety; if so, the reviewer will lose the merit of his grand discovery; but he may appeal to the arbitration of Darwin, and if he gets the "award" in his favour, he will soon find out how much it is worth among his scientific protégées. However, the said Professor Ptthmlnsprts, of King's College, has finally given his testimony that Mr. Ronalds "found the (telegraph-)worm"; and very sorry Professor Ptthmlnsprts must be that he kept him out of the honour for so very very many years, during which Professor Ptthmlnsprts had it in his own keeping. It will be curious to see whether he gets possession of it again. I never bet, but I should like to know the "odds" that he will—not!

In your number of the 8th December, Mr. Cooke is very complimentary to Mr. Ronalds, but he does not (to change one figure) seem inclined to recognize Mr. Ronalds' right to assume the shabbily-worn mantle (or should I say professor's gown?), cast off by the Professor. No doubt the Professor has found it "a world too wide for his shrunk" shoulders, since his measure has been more accurately taken by some of your correspondents.

Let us be just to all sides.

The reviewer represents Mr. Cooke as claiming in his pamphlet more than his fair share of the "Telegraph-worm." Now, if he has done so, he may deserve to lose the whole.

Mr. Cooke, however, asserts (1) that he has always limited his claims to the points which Sir I. Brunel and Professor Daniell awarded to him; (2) that they are consistent with his claims prior to the arbitration, and (3) with the (published) evidence laid before the arbitrators.

Which of the twain has made good his statement?

The award credits Mr. Cooke as being "the originator of the undertaking," and with the right and title to "stand alone" as "having practically introduced and carried out the Electric Telegraph as a useful undertaking," but it only allows him to stand "on a footing of equality with Professor Wheatstone for their existing inventions." The award also speaks of "Mr. Cooke's plans and instruments in April, 1836," and again of his being engaged "in February, 1837, in completing a set of instruments for a railway tunnel."

It was then that his acquaintance with Professor Wheatstone commenced.

"For all that appears in the face of the award (says the *Saturday Reviewer*) Mr. Cooke may never have seen a Telegraph."

The "award" turns up its honest "face," and two notices of Mr. Cooke's instruments appear there in reply. The "award" justly enlarges upon Professor Wheatstone's "profound and successful researches" in electricity, which had prepared the way for the practical introduction of the electric telegraph; but it silently admits that in May, 1837, Professor Wheatstone had produced no telegraph, or, as the reviewer acutely suggests, "Mr. Wheatstone may never have contrived one."

This advised silence on the part of the arbitrators, in that cautiously-drawn document, the "Award," is very significant, when compared with the evidence in the published arbitration papers—there evidence explains "silence."

Backed by the recognition of Cooke's "plans and instruments" in the award, Brunel and Daniell's decision that Cooke was not only the "originator," but also the "practical introducer and carrier out of the electric telegraph as a useful undertaking," may lose its "unmeaning" character in the *Saturday Reviewer's* eyes;—blinder men have recently discovered a meaning in the "award" that cannot eventually be undermined. The reviewer's futile assertion in favour of Mr. Ronalds is answered by himself—"Mr. Ronalds takes leave of the science at the first rebuff of the Admiralty, in 1816."

Mr. Ronalds is the last man to strut about in "cock-robin's," or in peacock's feathers. He does not need them. Mr. Cooke admits in your number cited above, that Mr. Ronalds might have been the practical originator of the telegraph, but he was not. "Mr. Ronalds was before the tide—we were both practical men, but it was my good fortune to take the tide at its turn." I was "his successor in the labour, at length successful, of producing a working electric telegraph."

To revert for an instant to the opening extract, in which the *Saturday Reviewer* states—"In a pamphlet, Mr. Cooke had asserted that he had

himself separately invented the telegraph," &c.—I would ask, Is the reviewer quite sure it was Mr. Cooke's pamphlet, and not Mr. Wheatstone's pamphlet, he had before him when he was quoting? At page 3 of the latter (or page 51 of Cooke's 1st vol., where the pamphlets are all printed together, with references), Professor Wheatstone writes—"Mr. Cooke alleges that he was himself 'the originator of the practical electric telegraph.' It would be easy to show that this is inconsistent even with the former printed admissions of Mr. Cooke. It is inconsistent with his *written* admissions. In a letter of the 20th October, 1840, he had urged Mr. Wheatstone to put him in a right position with regard to their joint invention—"not, indeed, as the original projector and leading inventor, for that I do not ask or desire." Thus abruptly halts a quotation, made expressly to fix inconsistency on Mr. Cooke's claims. Compare it with the same passage as it stands in the misquoted letter—"Not, indeed, as the original projector and leading inventor, for that I do not ask or desire, but as the inventor equally and jointly with yourself, standing in point of merit upon precisely the same ground." The words printed in italics were overlooked by Mr. Wheatstone when selecting his quotation. Page 274, vol. I.

Is this a fair specimen of the usual accuracy with which scientific men of the "Genus Professor" quote private letters sixteen years after they are written? Proh pudor! Or is it only what the "cock-robin variety," venture to risk on the chance of their being *no copy preserved*, to prove "that it was his worm?"

I am, yours, &c.,
ANTI-CKOCK-ROBINISM.

ON THE ELASTICITY OF ATOMS.

To the Editor of THE READER.

Sir,—Numerous facts tend to show that elasticity is a general property of matter, and if so, we must conclude that it affects the atoms of bodies. This would explain why the best machines are incapable of producing a vacuum, or, rather, would constitute another argument that a vacuum is merely a creation of fancy. It would also account, perhaps, for the discordant results which have attended the attempts to ascertain the height of the atmosphere.

If I have a column of air 100 centimetres long, standing over mercury at the nominal pressure H, all that is necessary to cause this volume to become 10 centimetres, for instance, is to establish a pressure P, which can be calculated with certainty. Thus the volume being in inverse ratio of the pressure, and the temperature being supposed fixed, 100 centimeters at H reduced to 10 centimeters at P gives—

$$\frac{100}{10} = \frac{P}{H}$$

Supposing the barometer to be at 76 centimetres (or 30 inches)—

$$\frac{100}{10} = \frac{P}{76} \text{ or } 760 \text{ centimetres (300 inches).}$$

760 centimetres of Mercury, therefore, represents the *elastic force* of the air compressed to 10 centimetres, and 760 ÷ 90, the pressure which would have to be established outside the tube to reduce the volume to 10 centimetres.

In this direction we arrive at a limit: practically, where the gas becomes liquid, or where the volume is reduced as much as mechanical means will allow; theoretically, where 10 = 0. But in the opposite direction no limit has been proved to exist, and all attempts to establish one theoretically or experimentally have hitherto failed.

At 45° of latitude Laplace's formation for barometric heights becomes—

$$X = 18393 \left(1 + \frac{2(T+t)}{1000} \right) \log. \frac{P}{P_n}$$

Now, if we suppose the air, in the highest regions, to have a temperature of -60° centigrade, that is, T + t = -60°, whilst P = 76 centimetres (the nominal pressure), and P_n = 0.001, or 1 millimetre (the barometer at the confines of the atmosphere) we find that X becomes about 28 miles English. The aurora and twilight rays, spreading to more than 20° from the sun, prove that the most distant atoms of air are at least 30 miles high. If we suppose the volume of air to increase as the squares of the distance from the surface of the earth, we get about 32 miles for the height at which P_n = 0.

But Bravais' twilight observations give 69 miles, whilst those of Lambert give 96; M. Liass' polarisation experiments have given 200 miles; observations of shooting stars 100 to 300; and the

streams of the Aurora Borealis (1859, witnessed by myself at Paris, and likewise observed at Rome) no less than 500 miles English!*

It is generally admitted that when a substance is extended its atoms recede from each other, leaving a wider "space" between them. All phenomena pertaining to such increase of dimension can be as easily accounted for by admitting that the atoms themselves (not the "spaces") are *elastic*. Originally spherical, on becoming elongated they produced cold, and on returning to the spherical condition, heat; as we observe when a band of caoutchouc is suddenly stretched and then relinquished.

For solids, a body whose length is l at 0° centigrade, becomes—

$$l(1 + kt)$$

at t temperature; k being the coefficient of dilatation determined by experiment. For liquids and gases the element k is influenced more and more by temperature, and such is, doubtless, the case, to a less extent, for solids also, for temperature modifies the elasticity of the atoms of bodies. This is very remarkable in tempered steel, and "Prince Rupert's drops," &c. A tempered substance is *less dense*, or, in other terms, *more elastic*, than before. The element k for glass differs according to the composition of the glass, that is, according to the *nature of the atoms*.

I am, Sir, &c.,
T. L. PHIPSON, Ph D., F.C.S.

The Cedars, Putney, S.W.,
31st Dec., 1866.

"CEDIPUS ROMANUS."

To the Editor of THE READER.

Sir,—My attention has only this day been directed to the letter of "E. H." in your journal of 22nd December last. I would be glad if you would allow me to say a few words in reply to it. My father, the late Rev. Canon Townsend, was the author of the "Cedipus Romanus." I have the book now before me, and will transcribe the title-page:—

The
CEDIPUS ROMANUS;
or,
an attempt to prove from the principles of reasoning
adopted by
The Right. Hon. Sir William Drummond,
in his
CEDIPUS JUDAICUS,
that
The Twelve Caesars
are the
Twelve Signs of the Zodiac.
Addressed to the higher and literary classes of society.
By the Rev. G. TOWNSEND, M.A.,
of Trinity College, Cambridge.
J. Hatchard, London.

"E. H." has correctly described the purpose of this treatise. It is short, and divided into 12 chapters, which are successively devoted to the proof of the application of each sign of the Zodiac to its own individual Caesar. Thus, Julius Caesar is identified with Aries; Augustus, with Taurus; Tiberius, with Gemini; Caligula, with Cancer; Claudius, with Leo; Nero, with Virgo; Galba, with Libra; Otho, with Scorpio; Vitellius, with Sagittarius; Vespasian, with Capricorn; Titus, with Aquarius; Domitian, with Pisces. The last concluding sentence of the book shew its scope and object. "I have pressed" (says the author) "nonsensical reasons to nonsensical conclusions. My object has been to shew that the arguments of Sir William Drummond will apply with equal success to Scripture and to history. I have chosen the *ex-absurdo* method of proving my position. It appeared to me to be alike necessary, justifiable, and conclusive. It has enabled me to expose the danger and folly of resting any system on coincidence, that fruitful parent of palmistry, physiognomy, craniology, astrology, and every other absurdity which has amused or astonished the world."

If you will favor me with space, I should like to relate the following anecdote, which I have often heard my father mention with much gratification. Shortly after the publication of the "Cedipus Romanus," he made the personal acquaintance of Sir William Drummond, who expressed to him his approbation of his work, and at the same time said, "that he had adopted the most effectual method of replying to him, and that his arguments were better met by playful irony than by argument."

I am, Sir, your obedient servant,
GEO. FYLES TOWNSEND.
St. Michael's Parsonage, Burleigh Street,
January 1st, 1867.

* It is worthy of note, perhaps, as I show in my book on *Meteors*, &c., that the results obtained from purely physical data are more concordant than those obtained from shooting-stars, twilight, and polarisation experiments.

THE NEW CHEMICAL LABORATORIES
IN PRUSSIA.

THE thirteenth report of the Science and Art Department of the Committee of Council on Education, which has just been published, contains a report by Professor Hofmann on the new chemical laboratories of the Universities of Bonn and Berlin that are now in process of building under his superintendence by the Prussian Government. In a description, covering some fifty pages and illustrated with numerous plans and views, the Professor gives a detailed account of the origin, extent and construction of these magnificent institutions, which, when completed, will undoubtedly exceed both as regard size and completeness any establishments of a like nature at present in existence.

The negotiations respecting the Bonn laboratory were instituted two years previous to those for the establishment of a new chemical school in Berlin, and the report accordingly commences with an account of the Rhenish institution. The reasons why Bonn was chosen as a site for one of the new chemical schools had best be given in the words of the report:—"Situated on the high road of Europe, on the banks of the mighty Rhine, surrounded by some of the most charming scenery of the world, distant but a few hours from the Belgian frontier, and scarcely farther removed from France, within reach of England by a short day's journey, in the midst of large agricultural, wine-growing, and mining populations, in close proximity with the great manufacturing districts of Rhineland and Westphalia (whose fast increasing industry has earned for them the name of the German Lancashire), united with the focus of this large industrial territory by a network of railways whose meshes are augmenting daily, itself the seat of one of the most flourishing universities in Germany,—the city of Bonn embodied a number of conditions which could not fail to secure the rapid success of a large chemical institution established at any moment within its walls." In order to gather all possible information which might prove of use in drawing up a programme of the requirements of the new institutions, the Professor visited in the autumn of 1863 nearly every laboratory in Germany "from that of Giessen, the first German university laboratory," built by Dr. Hofmann's father more than a quarter of a century ago for Liebig, down to the recently-founded chemical schools in Karlsruhe, Munich, Zurich, Heidelberg and Göttingen and the splendid institution just completed in the University of Greifswald. With the help of the experience thus gathered from all quarters the plans of the new building were drawn out, and the detailed contract amounting, to £18,450, was sanctioned by the Prussian Government; the building was commenced in the spring of last year so that it is at present being roofed in and will next summer be handed over to the Bonn University. The new laboratory is not in the town of Bonn itself but in the village of Poppelsdorf, about fifteen minutes distant, where, in fact, most of the scientific institutions connected with the University are situated. Abundance of land being at the disposal of the architect, the building has received the form of a cross enclosed in a rectangle, the ends of the former joining on to the middle points of the four sides of the latter,—an arrangement allowing every room in the structure to receive air and light from two sides. Together with the four enclosed courts it covers an area of 45,000 feet and is almost throughout but one story in height. Space has been provided within the institution for 60 students but a greater number could be accommodated without inconvenience. In addition to the rooms set apart for scientific purposes, which will presently be more fully described, the new institution contains a magnificent suite of apartments for the Director, dwelling rooms for three assistants, and lodging for the Castellan, *famulus*, and other servants of the laboratory. The ground floor contains forty-four rooms consisting, in the first place, of

three large laboratories each to accommodate twenty students, who have happily been divided into three classes, each apportioned to its own apartment: the beginners, the advanced students, and the young chemists engaged in original experimental investigation. For each of these laboratories a special "operation room" has been provided, in which are to be conducted all kinds of work requiring large pieces of apparatus, whilst operations whereby insupportable vapors may be evolved can be carried on in evaporation niches let into the walls. Communicating with these rooms are colonnades, opening on to the courts, and likewise provided with gas and water and all the requirements of chemical manipulation. Projecting from one of the outer facades of the building and in a line with the middle laboratory is the laboratory for gas analysis, which is shut off by means of ante-room from those parts of the institution where the chemical business is most active. Along the shorter cross-building are two balance rooms, two rooms for ignitions and fusions in which drying ovens, apparatus for organic analysis, &c., are provided, a laboratory for volumetric analysis, and lastly a library. The remaining limb of the longer cross-building, between the two front courts, contains a great lecture theatre, 40 feet square and capable of accommodating 250 students. It is lighted by seven large windows on each side, the two nearest to the lecturer descending to the level of the table, enabling him to employ the sunlight, under favourable circumstances, as an agent in his experiments. Behind the theatre are rooms for the preparation of the lecture illustrations, store-room, waiting room, &c. The front block of the building contains two large apartments, the chemical museum and the mineralogical museum, and a smaller lecture theatre for special courses of lectures. On turning thence to the right the visitor enters the side block of the institution, where is found a suite of rooms, entirely devoted to the scientific purposes of the Director, and consisting of a laboratory and sitting room, as well as a balance room and a combustion room. The basement of the building, in addition to several rooms for the stowage of reagents, apparatus, coal, &c., contains a laboratory for physiological chemistry, two furnace rooms for smelting operations, a workshop, a laboratory for medico-legal investigations as well as special accommodation for the preservation of condensed gases and for putting together of galvanic batteries. The only part of the institution which has a second story is the front block and this floor is entirely devoted to the magnificent suite of rooms allotted to the Director. That every care has been taken in this department also to make the colossal institution complete in every respect will be apparent when it is known that, besides the requisite dwelling rooms, the Director's residence contains a "splendid ball-room extending through two stories, amply satisfying the social requirements of a chemical professor of the second half of the nineteenth century."

We shall now cull a few particulars from the second part of Professor Hofmann's Report, which treats of the new chemical laboratory now in course of erection in the Prussian capital. The negotiations respecting the Berlin institution are of a still more recent date than those of Bonn. The University had from the time of her foundation made use of the chemical laboratory of the Royal Academy of Sciences for her students, the Professor of the University and the Chemical-Academician of the Society being one and the same man, and it was to the difficulty in readjusting this relationship, in accordance with the present demands of Natural Science, together with their inability to find a suitable position for their building, that the oft-postponed erection of a great chemical laboratory in the *Intelligenz Stadt* is mainly due. A site was at last decided upon, consisting of the grounds on which the Chemical-Academician's house stood, and a plot adjoining; so greatly, however, has land in the neighbourhood of Berlin increased in value that though the first-mentioned house

and land cost the Academy £315, in the year 1708, the newly-acquired plot of equal area, also to some extent built upon, was bought in 1864 for £18,000. The site of the Laboratory is close to the University, and very near the point of intersection of the two main streets of the city, the Friedrichstrasse and Unter den Linden. The area of the site is somewhat smaller than that covered by the Bonn Laboratory; the Berlin institution, however, has a second story throughout. The estimates of the architect amounted to £28,365; £3,750 were allowed for internal fittings; the Academy received £3,600 compensation for their portion of the site; and, finally, the part of the newly-acquired land that was used for building purposes cost £12,000, which sums give a total of £47,715, a truly magnificent grant on the part of the Prussian Government for the promotion of Natural Science.

The building was commenced in the summer of last year, and is now making rapid progress. The plans provide the same apartments as are found in the Bonn Laboratory; the limited area at the disposal of the architect, and the ground on either side being covered by lofty houses, however, rendered a modification of their relative situation a matter of necessity. It contains three laboratories, lecture-hall, museum, and all the various rooms devoted to special kinds of chemical manipulation, apartments for three assistants, as well as a semi-detached residence for the director. It will be unnecessary to give any further description of the departments of this institution, according as they do in every respect with the Rhenish institution. The ornamentation of the building has also been fully considered, and is designed with excellent taste. As if more expressly to dedicate the institution to its great purpose, and in order to do honour to the leaders of the past and present, the laboratory is to be adorned with the busts and medallions of the most illustrious chemists. In the vestibule are to be the busts of Faraday and Liebig, and on either side of the grand staircase those of Wöhler, Chevreul, Dumas, Graham, Bunsen, &c. Along the principal façade, and in the angles between the windows, will be placed fourteen monumental medallions, over life-size, dedicated to the great teachers of the past. England is represented by Cavendish, Priestley, Dalton, and Davy; France by Lavoisier, Berthollet, Gay-Lussac, Gerhardt, and Laurent; Germany by Mitscherlich, Klaproth, Rose, and Gmelin; and Sweden by Berzelius and Scheele.

REPORTS OF SOCIETIES.

THE ROYAL ARCHEOLOGICAL INSTITUTE, December 7th.—Octavius Morgan, Esq., M.P., and V.P., in the chair.—A fine series of paintings on panel, from chapel screens in the church of Bunbury, Cheshire; a few encaustic tiles; together with sketches and photographs of the church, and of some remarkably-incised monumental slabs; were exhibited by the Rev. William Low, who gave an account of the church and the works in progress there. The building is a fine specimen of the architecture of the fourteenth and fifteenth centuries. The nave appears to have been entirely rebuilt; in the chancel are tombs of Sir Hugh Calveley and Sir Hugh Beeston, and the panels came from the screens of their chapels, in the north and south aisles. The painting on the panels was remarkable for the force and brightness of the colors used, but the execution is coarse, and it is evidently provincial workmanship. Remains of painting in distemper had been found on the walls, probably a St. Christopher; and an altar-piece on a red back ground, powdered with stars, edged with black. The tiles had incised and heraldic patterns. A piece of sackcloth found in a stone coffin, two feet below the floor of the nave, was also exhibited.—Mr. J. Yates gave an account of the discovery of what appeared to be a Hebrew "charm," in connection with a crucifix that had belonged to the Priory of Gisborne, in Yorkshire. In the stem was a cavity in which was a slip of parchment with the Hebrew word *agla* several times written. This is supposed to be a kind of anagram of a sentence—"Thou art great for ever, O Lord."—M. G. Scharf then gave an account of the proceedings lately taken for the restoration of the portrait of King Richard II. belonging to the Dean and Chapter of Westminster, and illustrated his remarks by exhibiting tracings of the principal

portions of the picture taken by him before any change was attempted to be made in it, and of the face of the King since the operations had been completed. It was a matter of regret that better and fuller notes of the earlier state of the picture had not been taken, as the changes in it were so considerable and remarkable, but no one had anticipated their extent or importance. A very unsatisfactory photograph had been taken at South Kensington, and that, with Mr. Scharf's tracings, were now the only evidences of the once well-known picture. After detailing all that was known of the history of the picture, and describing its characteristic features, Mr. Scharf spoke of the doubts which judges of the art had entertained as to many parts of the work, and how those doubts were impressed on the custodians till they were induced to permit experiments to be tried. Those experiments were entirely successful. Thus encouraged, the work was continued, and the result was (as he fully believed) the genuine and entire reproduction of the first Royal portrait in the country exactly as it was executed by the artist of the fourteenth century. The substantial and sterling qualities of the painting were plainly shewn by their being obliged to use the strongest chemical solvents to get rid of the superincumbent work; but these had not the slightest effect upon the original painting. Mr. Scharf minutely detailed the changes that had been effected in the general appearance and accessories of the painting, and paid a high eulogium to Mr. Richmond, R.A., and Mr. Merritt, for their execution of the task committed to them. He concluded by expressing a hope that the picture would be returned to its original position in the Abbey.—The Dean of Westminster thanked Mr. Scharf for his able description, both of the picture and of the operations upon it. It was returned to the Jerusalem Chamber till the Abbey should recover from the confusion it was now in, owing to the introduction of warming apparatus, and the rebuilding of the rere-dos. It had been originally placed over the pew of the Lord Keeper, on the south side, and the lower part of the picture had been injured by the heads of those in the pew rubbing against it. The position was shewn by the anecdote of the Lord Keeper Williams, having struck upon the pulpit while Peter Heylyn was preaching against him, exclaiming, "Enough, enough, Peter." When the suggestion was first made about the restoration of the picture to its original condition, he had been supported by the opinion of his brother Dean of St. Paul's as to the propriety of assenting to such proceedings, and he was much gratified at the result.—In the discussion which followed, especially upon the precise date of the painting, Mr. Riley remarked that, as the King committed sacrilege by an act of violence at the Queen's burial, the picture might have been given by way of peace-offering. No documentary evidence referring to the picture had, it was stated, yet been discovered.—The Chairman, amid acclamations, warmly eulogized the moral courage and good taste shewn by the Dean and Chapter in this matter, and the skill which had reproduced so fine a work of art, as well as Mr. Scharf for his clear and interesting report of the operations.—Brigadier-General Lefroy, R.A., called attention to the more remarkable specimens of rifles and other fire-arms exhibited. In these days of rifle competition such objects had especial interest. Till very lately the earliest known rifle barrel in this country with a date was the beautiful sporting wheel-lock rifle belonging to Her Majesty, by whose gracious permission it was then exhibited. This piece is dated 1588. It is rifled in six grooves, and the spiral is about $\frac{1}{2}$ turn in the length. It is double-barrelled, the barrels one above the other, with the wheel and touch-hole of the lower barrel advanced, and the tube so much the shorter. It is beautifully mounted on a cedar or cherry stock, inlaid with ivory, in which the cypher HF occurs, and the butt-plate is of steel handsomely engraved in relief, and with the arms of Saxony. The lock is richly decorated. A barrel had, however, been lately acquired by the Museum authorities at Woolwich, on which was the date 1547, and this barrel had been accidentally discovered to be rifled. In no other collection was there any dated rifle nearly so old. There might be earlier in the country, at Warwick Castle for instance, but they were not marked with a date. The Woolwich acquisition had been taken from the Hungarian peasantry in the insurrection of 1849, and by them probably from some château. Like the other very early specimens of rifled arms, it was, doubtless, German work. The rifling had been in seven grooves with about one turn in twenty-two inches, but the grooving was now much worn down, and the fact of its being rifled at all was not at first suspected. It was acquired simply as an early dated fire-arm. The other arms exhibited, and

briefly referred to, were—a curious breech-loading, smooth-bored, matchlock harquebus, dated 1757, from the Tower collection. This arm appears to have belonged to Henry VIII. The barrel is chased and gilt; the armourer's mark is a *fleur de lis* surrounded by the letters W. K. Another specimen of nearly the same date as the preceding, also from the Tower. Among the carvings of the stock are the rose and *fleur de lis*. In the breech-loading arrangement of the Henry VIII. rifle the moveable chamber which carries the cartridge has exactly the form of that in vogue at the present day under the name of the "Snider" system. A fine sporting wheel-lock gun, smooth-bored, dated 1858, from the museum at Woolwich. The stock is beautifully inlaid with the tragical story of Pyramus and Thisbe. A fine sporting wheel-lock rifle, beautifully mounted, with inlaid stock, dated 1613, from the Tower collection. Brass furniture for fire-arms came into use at this period. The barrel is seven-grooved, with double lines between the grooving. A fine German sporting rifle, dated 1623, from the Woolwich collection. A late wheel-lock sporting rifle, formerly the property of the Emperor Napoleon I.; given by Napoleon III. to Mr. Wilkinson, of Pall Mall, and by him to the exhibitor, Mr. J. Latham. Mr. Latham examined the barrel, dated 1547, and made no question of its being rifled.—Mr. Hewitt remarked that it was a curious fact that the rifle seemed to have been originally recommended chiefly for protection. In mediæval times a contention between the "attack" and "defence" went on as it was doing now. The old cuirass was good against the sword or lance. Then fire-arms were invented. Then the breast-plate was strengthened;—but the rifle finally gained the ascendancy. Montecuculi spoke of "les arquebuses rayées contre les armes à l'épreuve."—Mr. W. Bernhard Smith remarked that military rifles were first used by Frederic the Great. They were adopted by the English and French about 1792.—Mr. J. Henderson called attention to a beautiful collection of Oriental arms and armour, comprising Persian shields and helmets of steel richly damascened in gold; battle-axes, Persian and Mahrattic; Kuttah daggers; a spear-head bi-forked Japanese sword, of great beauty; Beloochee or Afghan knife and poniards.—Mr. Bernhard Smith also exhibited a number of rare and beautiful Oriental daggers, kuttars, cresses, &c., all of remarkable workmanship, and many of them of early date.—Col. A. Lane Fox exhibited a leaden heart-case, with heart enclosed, found in Christ Church, Cork. About four years ago, one of the workmen engaged in cleaning the church put his hand in a niche in a pillar of the crypt and discovered this curious object. On examination, the heart was found to be preserved in salt. The shape of the heart-case is that of the conventional form of the heart. Drawings of the heart when first taken from the case (in which it still remained) were exhibited, and notes of the weights given. It was said, that when first found, a very thin coating of silver, much corroded, was adhering to parts of the case; and a story is supposed to be attached to the relic connecting it with some distinguished individual who had directed its burial in the East,—that on its way there the ship conveying it put into Cork harbour a mere wreck, and the heart was deposited in Christ Church and forgotten. Many remarks were made upon this singular and interesting object, in the course of which instances of heart-burial in mediæval and later times were referred to.—Mr. J. Yates exhibited a Romano-British urn, found at Geldestone, Norfolk. It was of large size, remarkably thin; not thicker than Greek or Etruscan vases, though of coarser material and with a rougher surface. Its form approaches the globular, and on the rim at the top is a simple ornament impressed by the potter. It had been found in the foundation of the chancel of the church, when under repair; and it was suggested that it might be evidence of the church having been built on the site of a heathen temple, as was certainly done in other cases; Roman interments had been found in the immediate neighbourhood.—Dr. Rock suggested that possibly the urn was not funereal, but worked into the wall to propagate sound.—The Chairman drew attention to a fine and early specimen of church plate, which he exhibited by the favour of the Rev. H. W. Jermyn, Rector of Nettlecombe, Somerset. It was a chalice and paten belonging to that parish, and was the second earliest piece of English plate known. On both are the Hall mark beautifully clear, and the annual letter or Lombardic B cusped outwards, which supplies the missing letter in the lists, and indicates the date 1459. The chalice is of silver gilt, six inches high. The stem is hexagonal, and the knob ornamented with six projecting quadrangular bosses, the intermediate portions being occupied

by pierced Gothic work. On one side of the foot a panel has been cut out, and a silver plate, deeply incised with a representation of the Crucifixion surrounded with foliage, has been clumsily riveted in; this plate has traces of enamel with which it had been once filled. The paten is in the form of a plate, having a brim round a sunken six-foil centre, the spandrels of which are engraved with a radiating pattern. In the centre is a circular depression, in which is a representation of the face of our Lord in translucent enamel on an engraved ground. Behind this representation, as it were, is the sacred monogram in 15th century characters.—Among the other objects exhibited may be specified—a lady's fruit-knife of the 17th century, found in Kingston House, Bradford-on-Avon, with a richly-decorated handle. A large carriage watch of Viennese make, date about 1712-1715; exhibited by the Rev. J. Bathurst Deane. Two leaves of a triptych, attributed to Mabuse (the property of W. Luard, Esq.); exhibited by Mr. W. Burges. Etui, of perforated brass, in form of a knife-sheath, containing two instruments of doubtful use; a knife in sheath of steel, chased with figures of Judith (?) and foliage; temp. Henry VIII.; exhibited by Mr. Bernhard Smith. Japanese bowl, of the pre-Christian period; exhibited by the Rev. H. Aston Walker. Portrait of Chaucer; a 16th century copy of the well-known miniature; exhibited by Mr. J. E. Nightingale. Enamelled locket, dated 1737; exhibited by Miss Estridge. Flint arrow-head, found on the coast of Canada; tiles from an old farm-house in Kidwelly; and a fossil piece of buck-horn, found in the Thames Embankment works, Whitehall; exhibited by Mr. E. Richardson.

ANTIQUARIES, December 20.—F. Ouvry, Esq., Treasurer, in the chair.—The Treasurer exhibited and presented to the Society a manuscript book of receipts of the Convent of St. Albans, during the 29th and 30th years of Henry 8th.—Mr. A. W. Franks, Director, exhibited:—1. A celt of French type found at Thames Ditton; 2. A piece of inscribed Samian pottery found in the city of London; 3. A bronze implement found at Wiesbaden.—Archdeacon Grant exhibited some bones and other remains found in a funnel-shaped trench near Aylesford.—Mr. E. Peacock exhibited a rubbing of the inscription on a brass at Ouston Church, near Doncaster.—Dr. G. Strong exhibited a picture of a Cross at Sellack, Herefordshire, and communicated a paper on the subject, as to which some further remarks were made by Mr. C. Spencer Perceval and Mr. W. H. Black.—Mr. J. J. Howard contributed a curious letter from Sir J. Harrington to Lady Russell, and Mr. G. Manners, one of the Marquis of Worcester.—Mr. Franks read a contract, dated 1514, between a tradesman and Sir Giles Strangways, for the erection of a tent, from the Earl of Egerton's collection of MSS.

MEETINGS FOR NEXT WEEK.

MONDAY.

ROYAL ASIATIC, 3.—A paper will be read "On the Vedas of the Hindus, and the Vedas of the German School," by Professor Goldstücker.

TUESDAY.

ENGINEERS, 8.—Discussion upon "Intercommunication in Trains in Motion," by Mr. Preece.

ETHNOLOGICAL, 8.—1. "On the Wild Tribes of Central India," by Lieut.-Col. E. T. Dalton and Dr. Mouatt.—2. "On the History and Migration of Cultivated Plants in reference to Ethnology—Sacchariferous Plant," by Mr. J. Crawford.

ROYAL INSTITUTION, 3.—"On the Chemistry of Gases," by Professor Frankland (Juvenile Lectures).

WEDNESDAY.

GEOLOGICAL, 8.—1. "On the Age of the Lower Brick-Earths of the Thames Valley," by Mr. W. Boyd Dawkins.—2. "On the Occurrence of Consolidated Blocks in the Drift of Suffolk," by Mr. George Maw.—3. "On the Jurassic Fauna and Flora of South Africa," by Mr. Ralph Tate.

THURSDAY.

ROYAL, 8.30.

ZOOLOGICAL, 8.30.—1. "On *Hyalonema mirabile*, Gray," by Dr. J. S. Bowerbank.—2. "On the Birds of Veragua, with descriptions of New Species," by Mr. O. Salvin.—3. "On the Lepidopterous Insects of Bengal," by Mr. F. Moore.

ART.

Half-hour Lectures on the History and Practice of the Fine and Ornamental Arts. By William B. Scott, late Head Master, Government School of Art, Newcastle-on-Tyne; Author of "Memoirs of David Scott, R.S.A." Second Edition, revised by the Author. With Fifty Illustrations engraved by W. J. Linton. Pp. 369. 8s. 6d. (Longmans.)

IF the importance of the pursuit of any object is to be measured by the amount of expressed thought it calls forth, the culture of the Fine Arts must be in a satisfactory

stage. The press of late years has literally teemed with books on the subject; and, what is much to the purpose, all of them, with one or two exceptions, of the twaddle order—have been veritable contributions towards the proper understanding of Art and its relations to mankind. We have had on the subject disquisitions general and special; philosophical and technical; criticisms from this point of view and from that; histories of schools and periods, branches and departments: but all of these, unfortunately for the general reader, have been addressed to the more or less initiated, and to the wealthy of the land; and the man whose eyes could not pasture on the well-furnished walls of his own library, and whose hand could not wander readily to the latest bit of Fine Art exposition or illustration, had to go uninformed as to these things; and, consequently, there was nothing left for him but to relegate æsthetics, and all thereto pertaining, to the melancholy region of unintelligible gabble.

A similar idea to that which we have just expressed, must have occurred to the author of the "Memoir" of the gifted and lamented David Scott, while framing his "Half-hour Lectures on the History and Practice of the Fine and Ornamental Arts."

In the first place, he has been careful to make his book perfectly intelligible and popular, "though," as he says himself, "not necessarily superficial." He, no doubt, properly thinks that the difference between the brain of a working man in relation to the philosophy of Art, and every other kind of philosophy, indeed, as compared with that of the gentleman—or, rather, man of culture—is in the main a matter of exercise and training, and that the original vigour of both is pretty much the same. In Art, of course, there must be a basis of natural taste on which to build, whether in the case of the rich man or the poor. Granting this, furnish the student with the necessary means, and the building goes on apace.

In the second place, Mr. Scott's elegant little octavo is published at a price within the reach of all to whom Art has any possible significance. To be catholic and diffusive, every art and science, like religion, must have its Evangel, not secreted for rare reference on high days and holidays in a museum, but laid lovingly on the snuggest shelf of one's own room, and familiar as the widow's cruse, and much more inexhaustible.

That Mr. William B. Scott has produced such a treasure as we have described, a glance at the plan of his book will in a great measure prove, although to the careful reader we must leave its fuller appreciation. Very justly imagining that "whatever touches us most deeply in the forms or motives of Art dates no farther back than our own era, Mr. Scott begins his admirable *resumé* with a glance at the state of Art when Christianity began to make itself felt in the West. From the Latin Church, with its catacombs, its paintings, altar-pieces, and ivory carvings, he carries the reader to the Greek, and shows him the sacred pictures of Byzantine Art, and how it was influenced by the Iconoclasts, and perpetuated by the industry of the monks of Mount Athos. Then we have Celtic Art with its Runic sculpture and its wonderfully-illuminated manuscripts; and this leads him on to block books and printing. Architecture he carries from the Roman period down to the modern English; and under this head Mr. Scott includes tombs and monuments, graves and catafalques, and is at special pains to demonstrate the true relations and merits of the Renaissance. Beginning once more, we have Art as expressed in metals, gold, silver, bronze, iron, and pewter, as well as a history of engraving on wood and copper, leading naturally up to the Art inventions of our own time. Then again we have Art as it appears in earthenware, porcelain, and glass. In the first are included majolica and Palissy ware; in the second China, Dresden, Sèvres, and English porcelain; in the third, glass-painting, ancient, Venetian, and modern jars. In painting we have not only a brief history of

its schools, ancient and modern, but a full description of its methods, whether as pertaining to fresco, tempera, oil, or water-colour. All this is appropriately crowned by a treatise, occupying the last three chapters, on "The ideas which constitute the subjective basis of all Art, and in the critical form in which those ideas have been expressed." It will thus be seen that our author has traversed the whole domain of Art, fine and ornamental; and had the illustrations been a little more plentiful, and the index somewhat fuller, the volume would have been all but perfect.

Throughout the whole book Mr. Scott never forgets his own individuality, and he imparts thereby a certain piquancy to his pages. He does justice to the late pre-Raphaelite movement, and, in mentioning water-glass painting, takes occasion to pay a well-merited compliment to Daniel Maclise. We regret to hear, by-the-bye, that grave apprehensions are entertained as to the durability of the water-glass process introduced into this country by Mr. Maclise. The great painter's brother, Dr. Maclise, in carefully examining the Waterloo and the Trafalgar lately, could distinctly make out, as we understand, the incipient beginnings of something like decay. The silica washing, it appears, does not keep out the dust.

Reverting to Mr. Scott's book, we would remark, in conclusion, that it is not so much "Half-hour Lectures" as he modestly calls it, as a veritable Handbook to the History and Practice of the Fine and Ornamental Arts, and a handbook, moreover, which will yet see many editions. It is the most complete single volume on the subject we know, and we cannot close it without tendering him our heartiest congratulations.

MISCELLANEA.

A CURIOUS Society for the study of ballads and circulation of books exists in Sunderland. It consists of six workmen, one a cork-cutter, with a family of six, earning 30s. a week; two wood-carvers for ship-work, a rough kind of carving; one a watchmaker; one engine-fitter, who having lost a finger, paints photographs; and another wood-carver, who has also turned photograph painter. These men buy all the old books of ballads and cheap books that with their small means they can get hold of, and make a point of reading them all. They buy or borrow Carlyle's and Ruskin's cheap books, have Sir Walter Scott's edition of Sir Tristram, J. Wilson, Hogg, Byron, all the Cumberland Poets and Selections, &c. We believe that like little knots of working-men exist in most of our Northern towns and villages. The South is some way behind, we fear.

ANYONE on the look-out for Early English books at moderate prices should take advantage of the temporary fall in price of Messrs. Bell and Daldy's handsome 3 vol. quarto edition of Gower's *Confessio Amantis*, by Dr. Pauli. At these publishers' trade-sale, the book was offered at a comparatively low price to the trade, and the result is that the volumes published at £2 2s. can be had, for a time, among the second-hand booksellers, for 24s. Sir F. Madden's admirable edition of *Layamon* can also be had for £2 2s., and Dr. White's of the *Ormulum* for 15s. These books will, probably, never be on sale at lower prices till the Early English Text Society re-edits them, and that can hardly be for eight or ten years hence, such is the mass of our unprinted English MSS., and the apathy of Englishmen about them.

WE hear that the grant to the Master of the Rolls for the National Series of Chronicles and Memorials is this year to be cut down from £2,000 to £1,000; but whether the other £1,000 is to go to Scotland, or to the photo-zincograph fac-similes of our early charters, we have not heard. One rumour is that it is to go to the country gentlemen as compensation for the cattle plague, but that we do not believe. Whatever the cause, the reduction is much to be regretted, for (with some exceptions) the *Chronicles and Memorials* do credit to the Government, and there are plenty more needing to be added to those already published.

The *Chess Player's Magazine*, till the present time issued by Messrs. Kent & Co., will in future be published by Messrs. Adams and Francis. The volume for 1866 is now complete, and fully sustains the character of the periodical.

Mr. COCKAYNE thus announces his new publication, to which we alluded a fortnight ago:—"The Shrine, a collection of Occasional Papers on Dry Subjects. No. 3 is in the press, and will contain Malchus, a story of Eastern adventure, in Saxon English, from a MS. in the Cottonian Collection. And other matter. Each number makes sixteen pages, and to subscribers the price is one shilling. Subscriptions received for past or future numbers by Oswald Cockayne, 17, Montague Street, Russell Square, London. A volume of about 320 pages is intended." "A Dictionary of the Oldest English, vulgarly mis-named Anglo-Saxon, from the printed literature, and from a body of transcripts of what remains unpublished, is in preparation by Oswald Cockayne, M.A., Cantab."

A PROPOSAL has been laid before the delegates of the Oxford University Press for a companion volume to Mr. Morris's specimens of Early English, 1250-1400, which we review this week. It is to consist of a series of extracts, illustrating the manners, meals, and customs of Early England. Passages occur in one writer's work describing a man's hesitation to turn out of bed to early mass; in another the way he dressed, breakfasted, did business, hunted, dined, gambled, gave audience, supped, undressed, and went to bed, with many other details. The proposal is to collect all these, and, while making a reading or class-book of them, give the boy or student the fullest possible picture of English home-life in past days. Not a bad notion, we think.

THE Papers of the late accomplished scholar, Professor Siegfried, formerly Professor of Sanskrit at Trinity College, Dublin, have been sent by Dr. Todd, of Dublin, to Mr. Whitley Stokes, in Calcutta, to see what can be preserved by publication. Mr. Stokes has already extracted from them two papers, which are to be read before the Philological Society early this year; a lecture on the Vedas, and "Miscellanea Celtica;" "Miscellanea Græca," and "Miscellanea Latina" are to follow when Mr. Stokes's leisure serves, and possibly also some of the numerous notes on Vedic and Zend grammar that are among the deceased Professor's papers.

ALREADY rumours reach us that the Anglo-Saxon Professorship at Cambridge, called for in our number of last week, is about to be founded by a munificent donor. The details we are not allowed to reveal.

THE pretty little edition of the "Toilers of the Sea" just issued by Messrs. Sampson Low, with its two illustrations by Doré, has elicited from a lady correspondent the following letter:—"As an old inhabitant of the Channel Islands, I have read with great interest, M. Hugo's 'Toilers of the Sea.' His long residence, first in Jersey and afterwards in Guernsey, have made him well acquainted with their topography, superstitions, &c. The dangerous clusters of rocks interspersed amongst the larger and habitable islands, have been the theatres, from time immemorial, of wrecks and disasters. Originally volcanic in their origin, and worn by the action of the sea into numerous caves, inhabited by limpets, sea anemones, actinæ, &c., and such sea monsters as the Devil fish, who attacks the hero Gilliatt, it is almost impossible to picture in words, their wild grandeur and desolation. It was in the summer of 1852 I paid my first visit to Sark, which then contained the manor house, a church and clergyman's house, with a sprinkling of cottagers and fishermen. In the course of conversation with the clergyman, he told me he had not left Sark for upwards of 18 years. He had a friend drowned, I think from the upsetting of a boat, about that time, and from a superstitious feeling which he could not overcome, he could not bring himself to venture on the water. I heard many stories of the ferocity and tenacity of the Devil fish, and visited the caves at Sark called 'The Boutiques,' as I had frequently done those at Plémont, in Jersey. Even now, many of the country rectors in Jersey and Guernsey both, seldom leave their respective parishes, excepting for a visit to St. Helier's or St. Peter's Port, on market days or holidays, and think each their own island a Paradise. Indeed, spite of having become of late years fashionable places of resort, many of the merchants of Jersey and Guernsey, though rich, have not lost the simple and frugal habits of early days. It is pleasant to see the farmer, fisherman, sailor, &c., all in one, riding to market in his primitive cart, knitting as he jogs along with his honest dame, knitting, also, as they sit at their stalls in the market. M. Hugo has made the sudden rising of the tide amongst the rocks to serve as a foundation for some of the most pathetic writing in his book. The currents amongst the rocks are so swift, that it is not safe to venture any distance from the shore without a guide, and there is seldom a year passes without accident in one or other of the islands from this

cause. You think yourself safe, and in a moment the tide rushes—in stormy weather faster than a horse can gallop—and surrounds you, when it is equally dangerous to go on or go back. I remember well, when an engineer, officer, and party, returning from Elizabeth Castle, having out-staid their time by some ten minutes, narrowly escaped with their lives from this cause. M. Hugo has been a keen observer of sky, and wind, and weather, and his description of the rising tide and gathering of the storm are drawn from nature. Any one who chooses to go in stormy weather to St. Owen's bay, in Jersey, or many of the bays in Guernsey, will see the curious effect he describes, as the immense wave direct from the Atlantic comes rolling in, like a gigantic cylinder, and breaks with a roar which may be heard at many miles distant. In fact, to lovers of rock scenery, nothing can exceed the beauty of the bays and headlands of the Channel Islands, under their different aspects of storm and sunshine, but to ordinary tourists they are a blank, very few going out of the beaten track to enjoy a few days' climbing amongst the rocks. I have seen M. Hugo at all points in all weathers, and it is doubtless owing to his exile from France, and his finding a safe and pleasant refuge on these shores, where the book of marine nature has been unsealed to him, that he has given to the world 'The Toilers of the Sea.' 'It is an ill wind that blows no good.'

MR. TEGG has in the press "A Handy Book of the Law relating to Strikes, Lock-Outs, and Trade combinations," which will be rendered very interesting by a summary of the most important strikes and their settlement.

MR. HENRY BRADSHAW, of the Cambridge University Library, and Fellow of King's College, has added another discovery to those for which his name has become famous, namely, 1. Some fragments of a Troy-Book, written by Master John Barbour, Archdeacon of Aberdeen, the author of the *Brus*, who died in 1395, A.D.; 2. Forty thousand lines of *Lives of Saints*, by the same author. This Troy-Book was before supposed to be—as all Troy-Books are supposed to be—John Lydgate's; but Mr. Bradshaw having noticed that this Cambridge MS. was in the Northern dialect, took it down to see what change the Northern scribe had made in the Southern dialect. To his surprise, he saw, near the end—

Her endis the monk and begynnys barbour.

He turned back to near the beginning, and found—

Her endis barbour and begynnys the monk.

The question of authorship was settled; and in a Douce MS. at Oxford Mr. Bradshaw had afterwards the good luck to find 1,200 more lines of the poem to add to the 2,200 lines of the Cambridge MS. The evidence as to the *Lives of the Saints* is internal. They are in the Scottish dialect; they contain passages showing "that the writer was an ecclesiastic, past work from old age; that he felt specially bound to sing the praises of Saint Machar, the patron of Aberdeen (of which Barbour was archdeacon); that a story he tells of a Galloway Knight happened in the author's own time, and during the reign of King David Bruce, who died in 1370; and, further, after relating stories of events which happened in Galloway, he mentions one of an Elgin man, an old friend of his own, as one which he can tell with more confidence of its truth than he can assert of the Galloway stories. When we consider that John Barbour, the Archdeacon of Aberdeen, was engaged from 1375 onwards in writing the *Brus*, and that he lived till 1395, and apparently at Aberdeen, I think there can hardly be a doubt that this poem should also be added to the meagre list of the productions of the father of Scotch poetry." Mr. Bradshaw adds, with justifiable pride at his own discoveries, and in his own University's collection:—"To myself, it is a peculiar satisfaction to think that such treasures as the Gospel of Deer (with the Gaelic charters at the beginning—the only Gaelic charters in existence), and these two poems have been found in our own University Library; as it shows that however large and however shamefully it has been neglected, there is yet sufficient lying undiscovered to lead the keepers of the library to turn their attention to the books committed to their charge." Words worth thinking over, Messieurs Librarians, at many other places besides Cambridge. One thing we have to ask of Mr. Bradshaw—that he will compare the language of the *Lives* and the *Brus*, and see whether the same phrases and turns of expression, &c., are used in the one as well as the other, and ascertain how far the specialities of language and dialect bear out his conclusions. Mr. Morris's tests as between Northumbrian and Scotch should be applied.

THE READER.

5 JANUARY, 1867.

THE Sacred Harmonic Society's extra performance of the "Messiah" last week was distinguished by the return of Mr. Sims Reeves to take that part in oratorio from which he can be so ill spared. His voice was in excellent condition, and shone with its old beauty of expression in the opening recitative, "Comfort ye my people." This, and the recitative and airs beginning with "Thy rebuke"—judiciously allotted by Mr. Costa to the tenor—were alike declaimed with an exquisite pathos: in which quality of expression Mr. Reeves is not only first, but incomparably first, among the singers of sacred music. The irreproachable style of Madame Sainton-Dolby was as manifest as it always has been, and its excellence would make every musician who loves his art desire her presence in the concert-room as frequently as she pleases to allow it. But a friendly voice might perhaps also be pardoned for suggesting, that the time should not be indefinitely postponed when a due regard for the singer's own fame may make it expedient to consider the propriety of longer subjecting her voice to the trial of its exercise in so large a place as Exeter Hall. The soprano music was rendered by Madame Lemmens-Sherington with an excellence and care, which their customariness makes it a work of supererogation to praise. Her facile vocalization was perhaps best displayed in the "Rejoice greatly," but her extreme freshness of tone was equally apparent in "How beautiful are the feet," and "I know that my Redeemer liveth." Mr. Weiss, who shared the bass with Mr. Lewis Thomas, is too thoroughly acquainted with Handel not to discharge his duty well, and the latter gentleman gave "Why do the nations" in vigorous rivalry of his coadjutor. Of the choruses the "Hallelujah" retained its immemorial precedence; after which, "For unto us a child is born" was the most telling. The instrumentation was as thoroughly good as Mr. Costa and his band could make it: than which it is difficult to say more.

MESSRS. SMITH, ELDER & Co. have issued a cheap half-crown edition of "The Conscript," from the French of MM. Erckmann and Chatrain.

AMONGST Almanacs "The Illustrated Farmer and Gardeners' Almanac" is conspicuous. It is a quarto of one hundred and twelve pages, beautifully printed, and containing a very carefully-selected amount of information appropriate to its title. This must not be confounded with the "Farmers' Almanac and Calendar for 1867."

On Friday, the 21st December, the subject of ballooning was entered into at the Literary Institution of Barnet by Mr. Coxwell, who divided his lecture into two distinct parts; the former for the edification of his auditors; and the second part to their amusement. In addition to the most remarkable of the British Association ascents, Mr. Coxwell drew attention to the importance of employing balloons or aerostats for reconnoitering and destructive purposes. The lecturer then commenced a variety of sketches and anecdotes relative to his travels by air, land, and water. This was of itself no ordinary entertainment, as the dramatic powers possessed by Mr. Coxwell enable him to imitate and portray some of the most striking characters he has met with in his twenty-five years' eventful career.

"STEVEN LAWRENCE, YEOMAN," is the title of the new serial story, by the author of "Archie Lovell," to commence in the April number of the *Temple Bar Magazine*.

THOSE who are interested in the recent volcanic outbreak in the Greek island, Thera (Santorin), will find a very interesting résumé, illustrated by plates and woodcuts after photographs, in the fourth number of Petermann's *Mittheilungen* for the current year. The first part consists of a diary of the phenomena prepared by Justizrath Kind, the remainder a report by Dr. Julius Schmidt, Director of the Astronomical Observatory at Athens.

THE Museum of Practical Geology, Jermyn Street, has lately been fitted up throughout with arrangements for lighting it with gas, on a plan similar to that adopted in the South Kensington Museum, and it will shortly be opened to the public during certain evenings in the week.

THE *Schlesische Zeitung* records a very sad and very curious accident, occasioned by the explosion of frozen nitro-glycerine. This substance freezes at about 40° F., and when in the solid state explodes merely by being rubbed, on which account it is impossible to reduce it to smaller pieces by crushing or striking it. An unfortunate man, one "Schachtmeister" Krause, who tried this experiment on a frozen mass, weighing some six or eight pounds, was hurled by the explosion to a great height into the air, and then thrown into a shaft from fifty to sixty feet in depth.

DR. E. L. YOUMANS, of New York, has issued an American reprint in one volume of the most valuable essays on the correlation and conservation of forces. It includes Mr. Grove's essays on "The Correlation of Physical Forces;" Prof. Helmholtz's lecture on "The Interaction of Natural Forces," from the *Philosophical Magazine*; Dr. Mayer's three memoirs on "The Forces of Inorganic Nature," on "Celestial Dynamics," and on "The Mechanical Equivalent of Heat," from the same journal; Prof. Faraday's paper, entitled "Some Thoughts on the Conservation of Force;" Prof. Liebig's chapter from his "Familiar Letters on Chemistry," on "The Connection and Equivalence of Forces;" and, finally, Dr. Carpenter's essay from the "Quarterly Journal of Science" on "The Correlation of the Physical and Vital Forces."

AMONG Messrs. Hurst and Blackett's Announcements for the New Year are the following Works:—"New America," by William Hepworth Dixon, 2 vols. with Illustrations.—"Two Marriages," by the Author of "John Halifax," 2 vols.—"A Trip to the Tropics," by the Marquis of Lorne, 1 vol. with Illustrations.—"A Lady's Ramble in Bohemia in 1866," by Miss Eden, 1 vol. with Illustrations.—"Life in a French Chateau," by Hubert E. H. Jerningham, Esq., 1 vol. with Illustrations.—"Sybil's Second Love," by Miss Kavanagh, 3 vols.—"Nooks and Corners of Old France," by the Rev. G. M. Musgrave, M.A. Post 8vo. with Illustrations.—"Our Peculiarities," by the Right Hon. Mary Viscountess Combermere, 1 vol.—"Wild Life among the Pacific Islanders," by E. H. Lamont, Esq., 1 vol. with Illustrations.—"St. Alice," a Novel.—Also New Works of Fiction by the Hon. Mrs. Norton—Amelia B. Edwards—Jean Ingelow—Mrs. Marsh—Sarah Tytler—Georgina M. Craik—the Rev. J. M. Bellow—Walter Thornbury, &c.

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THE READER.

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Chief Engineer.

J. C. CAMPBELL, Esq.

Bankers.

THE CITY BANK IN LONDON.

PROSPECTUS.

THE St. Croix and Lake Superior Railroad now in course of construction, running from St. Paul and Hudson to Superior and Bayfield (the two important ports on Lake Superior) is so important a line, that Congress has not hesitated in making to the Company a grant of land of ten square miles for every mile of road, that is in all, one million five hundred and four thousand acres, to aid in the construction of the Road.

The towns of Superior and Bayfield on Lake Superior are about the same distance as Chicago from New York and other points by the Lakes, and navigation is open from Lake Superior about the same length of time as from Lake Michigan, on which Chicago is situated.

It is now proposed to raise a sum of £1,300,000, by way of seven per cent., first mortgage sinking fund land grant sterling bonds, on the Road, franchises, land grants, and all the properties of whatever description now owned, or that may hereafter be acquired by the Company, thus securing to the Bondholders punctual payment of interest and principal.

William H. Swift, Esq., Hon. Samuel J. Tilden, and Hon. Andrew H. Green, are Trustees for the first mortgage Bondholders, and all moneys received from the first mortgage bonds sold are to be paid to them in trust, to be by them disbursed (upon such vouchers as they may deem sufficient and satisfactory) for work done and materials furnished, in and about the construction and equipment of the road, and for such other expenses of the Company as the said Trustees may deem proper to be paid.

All cash receipts from sales of lands are to be used as a sinking fund in liquidation of the principal and interest of the debt, until a sufficient amount is absolutely in the hands of the Trustees, to provide for the entire mortgage debt. The object in arranging this debt in this shape is to avoid having numerous classes of bonds, which have heretofore militated against the credit of other Companies.

The capital invested in these Bonds is safe, because it is secured not only by a railroad, which will, when finished, be the shortest land carriage between the navigable waters of the Upper Mississippi and the Lakes, and which offers naturally the cheapest means of transporting the large quantity of wheat and other products grown in Minnesota and Wisconsin to the East, but also by a land grant of 1,504,000 acres from the United States Government.

The transporting of produce will prove largely remunerative; and as evidence of this, it must be stated that the wheat crop alone of those States of the past year was nearly one-eighth of the whole crop of the country; and to give a correct estimate of what that product will amount to when the railroads now in construction are completed, and those States attain that prosperity which may confidently be anticipated, would seem too exaggerated to be given here.

Many further reasons could be given to prove that this Railroad will be largely remunerative, and that it offers a good and solid security for any debt contracted for the construction of the same, independent of the benefits to be derived from the land grant of ten square miles to each mile of road.

This land grant however, given to this Company by Congress, gives a basis for credit but little understood or appreciated.

Congress granted the Illinois Central Railroad Company 3,840 acres or six square miles of land, situate at an average distance of 200 miles from Chicago, for each mile of road built.

They pay for their grant seven per cent. on their gross earnings. Notwithstanding which, their lands have been sold and are selling at high prices, and have made that Company one of the greatest and richest in America, and their policy has contributed largely to enhance the wealth and increase the population of the State of Illinois.

The St. Croix and Lake Superior Road receive at an average distance of 60 miles, from similar points as Chicago ten square miles or 6,400 acres per mile of road built, and they pay nothing whatever for the grant, the whole of which, when the road is completed, can, it is believed, be sold at higher rates than the lands obtained by the Illinois Central Railroad Company, owing:

First. To the fact that all the lands are within a short distance of a market, none of them being much more than one hundred miles from the Lake, making them, in respect to facility of transportation of the products, equal in value to lands that distance from Chicago.

Second. To the fact that nearly one-third of the grant consists of the best white pine timbered lands, for which there is an active and constantly increasing demand. The consumption of pine has now reached such a point, that before many years other timber must be substituted.

Third. One-third of the grant is composed of the best farming lands: and these farming lands will generally yield twenty bushels of wheat per acre, thus they are certain to realise large profits for the farmer, from that view it is believed that an average of at least twenty dollars per acre for that portion of the grant ought to be reached before they are disposed of.

Fourth. The remainder of the grant is estimated to be valuable for the hard timber, such as white oak, cherry, maple, and other varieties of hard wood. For farming purposes nearly the whole grant is valuable. The timbered lands, when cleared, make an excellent soil for winter wheat. The proximity of all the lands to market warrants their being cleared for agricultural purposes alone. All the lands have been released from taxation for ten years by the Wisconsin Legislature. The Bonds of this First Mortgage will be received at par in payment for land at scale of prices fixed by the Company.

A full statement, with all the particulars of this road, as made by the President and Directors of the Company, an estimate of the ultimate cost of construction and equipment of the road, as also an estimate of earnings, with a copy of the Acts of the Legislature of Wisconsin, and of the Congress of the United States, relative to the St. Croix and Lake Superior Railroad Company, with a copy of the Deed of Trust of Mortgage, of the form of the Mortgage Bonds, and of all the other documents relating to the present issue of Bonds, are to be had at the office of the agency of the Company, 14 City Bank Chambers, London.

Applications for these Bonds will be received up to the 5th January.—In London, at THE CITY BANK, as Bankers of the Company; Amsterdam, Messrs. WERTHEIM & GOMPERTZ; Rotterdam, Messrs. COMMANDITAIRE BANKVEREENIGING; from whom Prospectuses and Forms of Application can be obtained.